BDO KNOWS:

Troubled Debt Restructuring, Debt Modification and Extinguishment

BACKGROUND AND PURPOSE

Companies frequently fund their operations in part using debt and may renegotiate their debt for a variety of reasons from increasing borrowings to finance an expansion of their operations to managing cash flow difficulties. The debtor and creditor may agree to modify the current loan agreement (or debt instrument) or to exchange one loan agreement (or debt instrument) for another. The accounting guidance applicable to accounting for the restructuring of obligations does not distinguish between a loan agreement, a payable, and a debt instrument and we will use the term "loan" and "debt" interchangeably in this practice aid. This practice aid discusses the accounting for restructured debt from the perspective of the debtor. The document is intended to be used by practitioners of all experience levels. The examples are highlighted in gray. Users interested in only the accounting standards and interpretive guidance can pass over the highlighted areas of the Practice Aid. The examples within the body of the Practice Aid are simple and designed to explain the concepts. Appendix A provides complex examples designed for users who understand the basics of debt modification.

The debtor's accounting for the restructured loan depends on the facts and circumstances surrounding the changes to the loan. The appropriate accounting model depends on whether (a) there is a change in lender, (b) the transaction is considered to be a troubled debt restructuring, and (c) the loan agreement has substantially changed. The accounting literature does not distinguish a modification of a loan agreement from an exchange of loan agreements between the same debtor and creditor. If the debtor pays off the creditor of the original loan with proceeds from a new lender, then the debtor company should report the original loan as extinguished. If the debtor restructures the loan with the original creditor, then the debtor should first consider troubled debt restructuring accounting. If troubled debt accounting is inapplicable, then the debtor should determine whether the loan is substantially changed. If the restructured loan is not substantially changed from the original loan, the loan is considered to be modified. If the restructured loan is substantially changed from the original loan, the original loan is considered to be extinguished and the restructured loan is treated as a new borrowing.

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If a company and its creditor are related parties, then any debt extinguishment resulting in a gain likely is a capital transaction, the effects for which are not reported in the statement of operations.[1]

This Practice Aid provides the tests to determine the applicable model for accounting for a loan that is restructured with the same lender. The flowcharts in the Practice Aid summarize these tests. Depending on the results of the tests, the debtor may have to account for the restructured debt by:

- **Troubled debt restructuring –** Changing the amount of interest expense recognized in the statement of operations prospectively or recognizing a gain in the statement of operations using the basic extinguishment model (see below).
- **Modification or extinguishment –** Modifying the effective interest expense recognized in the statement of operations prospectively or derecognizing the carrying amount of the original loan using the basic extinguishment model (see below).

THE BASIC EXTINGUISHMENT MODEL

The extinguishment model for troubled debt restructurings and other extinguishments is outlined in ASC Subtopic 470-50, Debt Modifications and Extinguishments, and ASC Subtopic 470-60, Troubled Debt Restructurings by Debtors. The model requires that whenever an existing debt obligation is extinguished, the debtor should recognize a gain or loss in the statement of operations for the difference between the reacquisition price and the net carrying amount of the extinguished debt. Key definitions are:

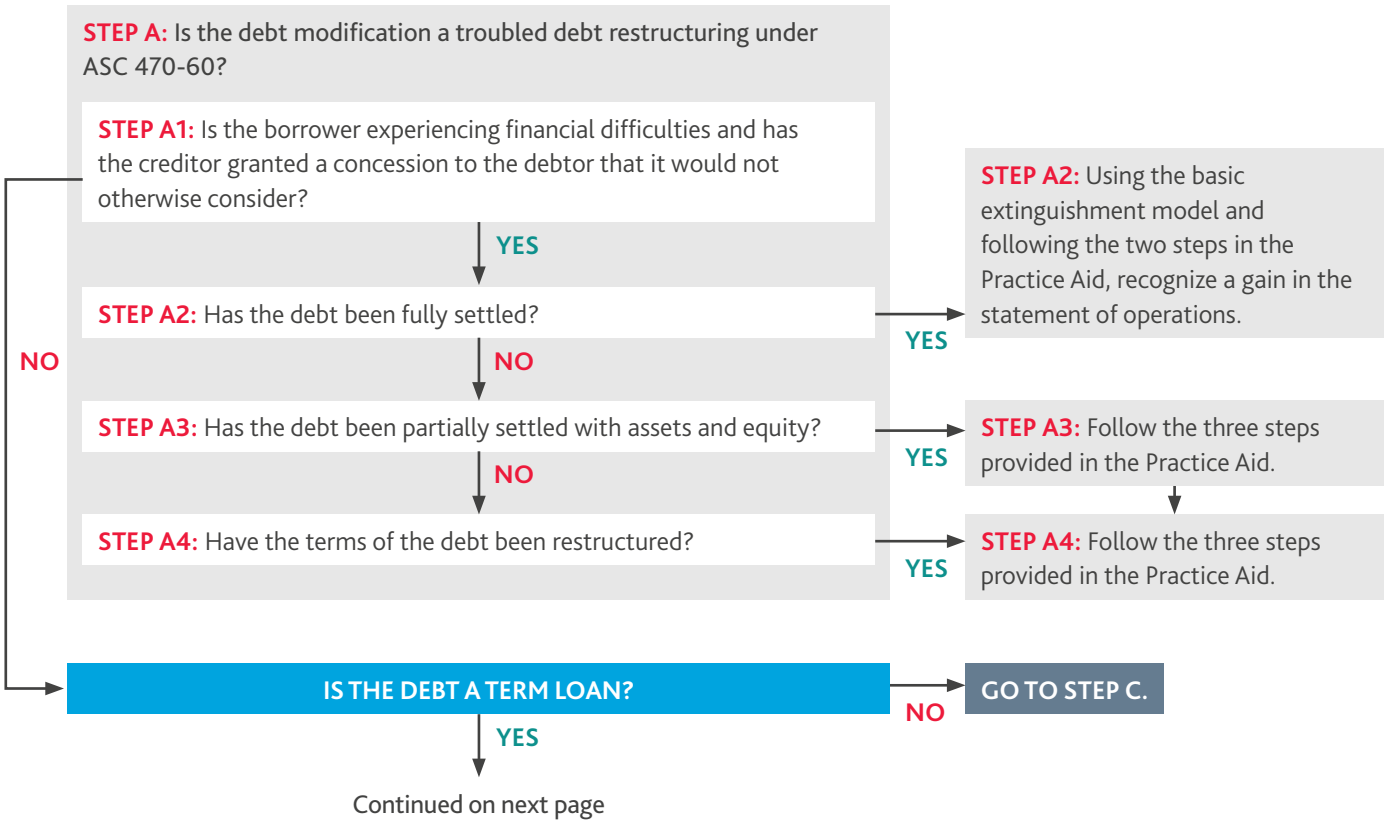
- **Reacquisition price –** The amount paid on extinguishment (e.g., the fair value of the securities issued, fair value of assets transferred, cash paid) and miscellaneous costs of reacquisition. If a company extinguishes debt early through issuance of common or preferred stock or the transfer of assets, the company should determine the reacquisition price of the debt by the fair value of (a) the stock issued, (b) the assets transferred, or (c) the debt, whichever is more clearly evident. In a partial pay down of the debt, the company should record the paydown using the fair value of the stock issued or the assets transferred.
- **Net carrying amount –** The face amount of the old debt, minus/plus unamortized discount/premium (fees paid to/received from the creditor), minus unamortized debt issue costs (fees paid to third parties), plus any accrued interest.
- **Effective interest rate –** The discount rate that equates the present value of all future cash payments with the net carrying amount of the debt and provides a constant return over the life of the debt.
- **Debt discount or premium –** Debt discounts are any fees paid by the debtor to the creditor and premiums are any fees paid by the creditor to the debtor. For example, if the debt has a discount, a company borrows less than the face amount of the debt and pays a higher rate of interest than the stated interest rate. If the debt has a premium, the company borrows more than the face amount of the debt and pays a lower rate of interest than the stated interest rate.
- **Debt issue costs –** Debt issue costs include third party fees such as legal costs, accounting costs, investment banking or banking fees (other than fees paid to the creditor), registration costs, and other costs directly attributable to realizing the proceeds of the debt issued. Debt issue costs should be reported in the balance sheet as deferred charges, classified as a reduction of debt on the liability side of the balance sheet under ASC 835-30-45-1A.

1 See Sagar S. Teotia, Remarks before the 2010 AICPA National Conference on Current SEC and PCAOB Developments, "*Debt Extinguishment – Related Party,*" for a discussion of extinguishment transactions between related parties in which gains result in capital transactions.

There is diversity in practice on the classification of the gain or loss upon the extinguishment of debt. Certain companies classify the gain or loss in interest expense. Other companies report the gain or loss on debt extinguishments separately. Both classifications are acceptable. It is not acceptable to classify a gain or loss on extinguishment of debt as an extraordinary item unless the gain or loss meets the criteria for presentation as an extraordinary item in ASC 225-20, Extraordinary and Unusual Items. We believe it will be rare that a gain or loss on extinguishment of debt meets those criteria.

The Practice Aid also considers accounting for preferred stock modification and extinguishments. The Aid does not discuss situations in which the debtor restates its liabilities generally, for example a debtor that has filed a petition with the bankruptcy court and expects there will be a general restatement of its liabilities as part of its reorganization as a going concern under Chapter 11 of the Bankruptcy Code.

For our related Practice Aid, BDO Knows: Complex Financial Instruments see www.bdo.com/insights/assurance/fasb/understanding-complex-financial-instruments.



IS THE DEBT A TERM LOAN?

NO → **GO TO STEP C.**

YES ↓

STEP B: Is the term debt modified or extinguished under ASC 470-50?

STEP B1: Is the present value of the cash flows under the new debt 10% or more different from the present value of the old debt's remaining cash flows using the effective interest rate of the old debt? Follow the four steps provided in the Practice Aid to perform the 10% cash flow test.

YES →

NO ↓

STEP B2: Was an embedded conversion option, which is not bifurcated, amended such that the change in its fair value is 10% or more of the original debt's carrying amount immediately prior to the change?

YES →

NO ↓

STEP B3: Was a substantive (i.e., reasonably possible of being exercised) conversion option, which is not bifurcated, added to or eliminated from the debt instrument?

YES →

NO ↓

STEP B123E: Extinguishment
The old and new debt instruments are substantially different, and the old debt is extinguished. Using the basic extinguishment model, follow the four steps provided in the Practice Aid to account for the extinguishment.

STEP B123M: Modification
The old and new debt instruments are NOT substantially different. The debt is modified. The difference between the old and new debt is recognized as a prospective change in effective interest rate. Follow the three steps provided in the Practice Aid to account for the modification.

STEP C: Has the revolving debt or line of credit had a reduction in borrowing capacity?

YES ↓

STEP C1

1. Write off unamortized discount and or premium (fees paid to or received from the creditor) and debt issue costs (fees paid to third parties) of the original revolving debt or line of credit on a pro rata basis. Calculate the pro rata write-off percentage by dividing the change in borrowing capacity by the original borrowing capacity.
2. Any fees paid to the creditor and any third-party costs incurred shall be associated with the new arrangement (that is, deferred and amortized over the term of the new arrangement). The remaining unamortized deferred costs relating to the old arrangement are also deferred and amortized over the term of the new arrangement.

NO ↓

STEP C2

Amortize remaining discount or premium (fees paid to or received from the creditor) and debt issue costs (fees paid to third parties) of the original line with any discount or premium (fees paid to or received from the creditor), and debt issue costs (fees paid to third parties) associated with the new arrangement over the life of the modified line.

STEP A: DOES THE DEBT RESTRUCTURING FALL WITHIN THE SCOPE OF ASC 470-60, TROUBLED DEBT RESTRUCTURING?

STEP A: Is the debt modification a troubled debt restructuring under ASC 470-60?

STEP A1: Is the borrower experiencing financial difficulties and has the creditor granted a concession to the debtor that it would not otherwise consider?

NO → If a term loan, go to Step B. If a revolving loan or line of credit, go to Step C.

YES ↓

STEP A2: Has the debt been fully settled?

YES → **STEP A2:** Using the basic extinguishment model, recognize as a gain:

1. The difference between the fair value of the assets transferred, if any, and the carrying amount of the assets; and
2. The difference between the net carrying amount of the debt and the fair value of the assets transferred/equity interest granted or the fair value of the debt.

NO ↓

STEP A3: Has the debt been partially settled with assets and equity?

YES → **STEP A3:**

1. Recognize as a gain/loss the difference between the fair value of the assets transferred if any, and the carrying amount of the assets.
2. Reduce the debt by the fair value of assets transferred/equity interests granted.
3. Proceed to Step A4.

NO ↓

STEP A4: Have the terms of the debt been restructured?

YES → **STEP A4:**

1. Determine future cash flows of the restructured debt.
2. If the future cash flows are less than the carrying amount of the debt, reduce the carrying amount to the total of future cash payments. Record the reduction as a gain.
3. If the future cash flows are greater than the carrying amount of the debt, account for the change in debt prospectively, using the effective interest rate that equates the carrying amount to the future cash flows.
4. Prepare the journal entries.

Troubled Debt Restructuring

ASC 470-60 and this section of the Practice Aid discuss troubled debt restructuring from the perspective of the debtor (the debtor, the company, or the borrower). For troubled debt restructuring from the perspective of the creditor (the creditor, the lender), see ASC 310-40, Troubled Debt Restructurings by Creditors. The ASC Master Glossary states, "A restructuring of a debt constitutes a troubled debt restructuring if the creditor for economic or legal reasons related to the debtor's financial difficulties grants a concession to the debtor that it would not otherwise consider." Under ASC 470-60-15 as indicated in the definition and discussed in-depth in this section, the two key features of a troubled debt restructuring are that the debtor is experiencing financial difficulties and the creditor has provided concessions associated with the economic situation of the debtor.

Debt, bonds, notes, and accounts payable, if formally restructured, can all be modified in a troubled debt restructuring. Four common examples of troubled debt restructurings provide an introduction to the topic. RCompany is in an industry suffering a downturn, and like many companies in this industry, is encountering liquidity issues:

1. RCompany owes Lender Inc. $1.5 million; Lender accepts $1 million cash from RCompany in full settlement of the debt.
2. Lender Inc. holds RCompany bonds in the amount of $5 million. Lender accepts assets from RCompany's having a fair value of $4.25 million as full settlement of the bonds.
3. RCompany offers to settle its $7 million note payable to Lender Inc. for $5.6 million in its equity securities. Lender accepts the stock in full settlement of the note. The conversion of the note into equity is not a provision of the initial note payable contract.
4. Lender Inc. negotiates with RCompany to modify the terms of R's debt. Lender and R do not exchange any assets or equity. To facilitate payment of the debt and keep R operating, Lender reduces the contractual interest rate to 2%, below the current market rate; extends the due date from 12/31/16 to 6/30/18; reduces the face amount of the debt from $9 million to $7 million; and reduces the accrued interest that RCompany owes from $1 million to $400 thousand.

Step A1: Is the Borrower Experiencing Financial Difficulties and Has the Creditor Granted a Concession to the Debtor that It Would Not Otherwise Consider?

The debtor should assess whether it is experiencing financial difficulties if it has had deterioration in credit since the debt was originally issued. For companies that are rated by credit rating agencies, an indicator of such deterioration might be a decrease in credit rating from investment grade to noninvestment grade; however, changes within investment grade are not considered a deterioration of credit. For all companies, other indicators of deterioration include a drop in the value of loan collateral, generally poor performance in the company's industry sector, inability to borrow at reasonable rate, liquidity issues, and/or a decline in the company's performance. ASC 470-60-55-8 notes that all of the following factors are indicators that the debtor is experiencing financial difficulties:

- The debtor is currently in default on any of its debt;
- The debtor is the process of or has declared bankruptcy;
- There is substantial doubt about the debtor continuing as a going concern;
- The debtor has securities that have been delisted;
- The debtor forecasts that its cash flows will be insufficient to service the existing debt (principal and interest); and/or
- The debtor does not have access to any other funds to service its debt.

The debtor is not considered to be experiencing financial difficulties if the company is currently servicing its old debt and can obtain funds at a rate equal to the current market interest rate for nontroubled debtors from other creditors and the creditor agrees to restructure the debt solely to reflect decreases in market interest rates or improvement of creditworthiness of the debtor.

A creditor generally grants a concession to a debtor in an attempt to protect as much of its investment as possible. Under ASC 470-60-55-10, if the debtor's effective borrowing rate on the new debt is less than the effective borrowing rate of the old debt immediately prior to the restructuring, the creditor has granted a concession. The effective interest rate is defined as the discount rate that equates the present value of all future cash payments with the net carrying amount of the old debt and provides a constant return over the life of the debt.

A restructuring of troubled debt may include, but is not necessarily limited to, one or a combination of the following:

- Transfer of assets or issuance of equity interest;
- Modification of terms of the debt such as:
  - Extension of the maturity date or dates at a stated interest rate lower than the current market rate for new debt with similar risk;
  - Absolute or contingent reduction of the stated interest rate;
  - Absolute or contingent reduction of the face amount or maturity amount of the debt; and/or
  - Absolute or contingent reduction of accrued interest.

There are certain factors that affect the lender's return on the company's loan, but do not affect the company's accounting such as the fair value of the debt immediately before and after the restructuring, how long the lender held the debt, and how much the lender invested in the restructured debt.

Step A2: Has the Debt Been Fully Settled?

A debtor may transfer assets and/or equity interests to the creditor to fully settle the debt. Under ASC 470-60-35-2 to 4, the debtor company should use the basic extinguishment model outlined on page 3 to account for the gain/loss on the settlement. The debtor should recognize two components of the gain/loss upon settlement:

1. The difference between the fair value of the assets transferred, if any, and the carrying amount of those assets, classified as gain/loss on asset disposal; and
2. The difference between the net carrying amount of the debt and the fair value of the assets transferred/equity interest granted or the fair value of the debt settled, whichever is more clearly evident, classified as gain/loss on debt restructuring.

For example, a company transfers a building with a net book value of $1,500,000 and a fair value of $2,000,000 to its creditor in full settlement of a $2,200,000 debt obligation. Under (1) the company recognizes a gain on transfer of the building of $500,000 for the difference between fair value and net carrying amount of the building. Under (2) the company records a gain of $200,000 on the settlement of the debt for the difference between the fair value of the building transferred and the $2,200,000 net carrying amount of the debt.

Step A3: Has the Debt Been Partially Settled?

Companies that restructure debt by transferring assets should recognize the difference between the fair value and carrying amount of assets transferred to the creditor as a gain or loss. The carrying amount of the debt should be reduced by the fair value of the assets transferred or of the equity interest granted under ASC 470-60-35-2. For partial settlement, the guidance precludes companies from utilizing the fair value of the debt to calculate the reduction of the carrying amount of the debt. This prohibition prevents arbitrary allocations between extinguished and outstanding debt. If a company pays cash in partial settlement of debt, the carrying amount of the debt should be reduced by the amount of cash paid. Gain on the restructured debt should only be recognized if the remaining carrying amount of the debt exceeds the total undiscounted future cash payments of the debt (principal plus interest) after the restructuring. If the number of future payments is indeterminate because the face amount and accrued interest is payable on demand, estimates of total future cash payments should be based on the maximum number of periods possible under the revised debt agreement. The company should follow the guidance in Step A4 to determine the accounting for the remaining life of the debt.

Step A4: Have the Terms of the Debt Been Restructured?

Under ASC 470-60-35-5 to 6, the debtor in a troubled debt restructuring that involves a modification of the terms of the debt should perform the following steps:

1. Determine the undiscounted future cash flows on the restructured debt including principal, interest, and any other payments exchanged between the debtor and creditor.
2. If the undiscounted future cash flows are less than the carrying amount of the debt:
   a. Reduce the carrying amount of the debt to equal the total of future cash payments. Record all future payments as reductions to the carrying amount of the debt; and
   b. Record the remaining reduction as a gain. If the creditor is a related party, record the amount of the gain as a capital transaction.
3. If the undiscounted future cash flows are greater than the carrying amount of the debt, account for the change in the debt prospectively by determining the effective interest rate that equates the carrying amount of the debt to the present value of the remaining cash flows. In this case, no gain or loss is recognized.
4. Prepare the journal entries.

Payments to the creditor in a restructuring are accounted for as noted in the paragraph above. Third party costs such as legal and accounting fees are accounted for as follows:

TYPE OF THIRD PARTY FEES:	ACCOUNTING FOR THIRD PARTY FEES:
a. **Fees for equity** issued to restructure debt	Deduct fees from the amount recorded for that equity interest
b. **Fees** paid to restructure debt	If there is a gain from the restructuring, reduce the gain by the fees If there is **no gain** from the restructuring, **expense** the fees
c. **Fees** for both the issuance of equity and the restructuring of the debt	Prorate the fees on a reasonable basis: ▶ Account for the equity fees as noted in a. ▶ Account for the cash fees as noted in b.

If a company has recently restructured its debt and is currently restructuring that debt again, the determination of the effective borrowing rate must reflect the carrying amount of the debt immediately preceding the earlier restructuring. The standard does not define the term "recent" and consequently, companies should use judgment. Generally, we believe the recent past may be up to twelve months based on an analogy to 470-50-40-12(f). However, the "lookback" period may be shorter, for example, if the recent restructuring occurred only three months prior to the current amendment.

A company determines if the second restructuring of the debt is a trouble debt restructuring by:

1. Calculating the effective interest rate that equates the carrying amount of the debt before the first restructuring to the cash flows of the second restructured debt; and
2. Comparing the effective interest rate calculated in 1 to the effective interest rate of the debt before the first restructuring.

If the effective interest rate of the second restructured debt is lower than the rate on the debt immediately preceding the first restructuring, a concession has been granted, and the company should account for the change in debt as a troubled debt restructuring. If the effective interest rate of the second restructured debt is higher than the rate on the debt immediately preceding the first restructuring, a concession has not been granted.

If the debtor company determines that the restructuring is not a troubled debt restructuring, then it should analyze the change in debt to determine whether it is a modification or extinguishment by testing the restructuring under Step B (term debt) or Step C (revolving debt).

EXAMPLE TDR.1 - TROUBLED DEBT RESTRUCTURING – GAIN

FACTS

R Company has debt with a carrying amount of $5,000 currently owed to Lender, Inc. R Company is having financial difficulties and Lender grants R Company a concession on its debt. After negotiations with Lender, R Company's debt is reduced to $3,000 due in 10 years, with interest of 5% due annually.

ANALYSIS

Step A4.1: Determine the undiscounted future cash flows of the restructured debt
The future cash flows R Company will pay Lender, Inc. on the restructured debt total $4,500 ($3,000 of principal plus $1,500 interest ($150 per year for 10 years)). The future cash flows of $4,500 are less than the carrying amount of the debt of $5,000.

Step A4.2: Reduce the carrying amount to the total of future cash payments and record the remaining reduction as a gain
R Company will reduce the carrying amount of the debt by $500 ($5,000 - $4,500) and record a gain of $500.

Step A4.4: Prepare the journal entries
R Company will not record any further interest on the debt. All principal and interest payments will be recorded as reduction of debt. When the Company pays the balance of the debt in year 10, it will extinguish the debt.

Date of restructuring

Dr	Old Debt	$5,000			
			Cr	New Debt	$4,500
			Cr	Gain-Restructured Debt	$ 500

Years 1 – 10

Dr	New Debt	$ 150			
			Cr	Cash	$ 150

Year 10

Dr	New Debt	$3,000			
			Cr	Cash	$3,000

EXAMPLE TDR.2 - TROUBLED DEBT RESTRUCTURING – NO GAIN

FACTS

S Company has debt that is due to its creditor, Lender, Inc. of $2,000 on August 1, 2019. S Company is having financial difficulties and Lender, Inc. grants S Company a concession on its debt. After negotiations with Lender, S Company will have debt with a face amount of $1,500, due over 10 years with an interest rate of 7.5%.

ANALYSIS

Step A4.1: Determine the undiscounted future cash flows of the restructured debt
S Company determines the annual interest and principal payment on a $1,500 note with an interest rate of 7.5% to be $221 by using TValue as shown in the attached file. The Company concludes that the future cash flows of $3,710 ($221*10 = $2,210; $2,210+$1,500=$3,710) are greater than the carrying amount of $2,000.

Nominal Annual Rate: 7.500 %

CASH FLOW DATA

	Event	Date	Amount	Number	Period	End Date
1	Loan	08/01/2019	1,500	1		
2	Payment	08/01/2020	221*	10	Annual	08/01/2029

*calculated by TValue

Step A4.3: Determine the effective interest rate on the restructured debt and account for the change in the debt prospectively
S Company determines the effective interest rate of the new debt to calculate the entries for the remainder of the life of the debt. S Company uses TValue as shown in the attached file and the schedule below to determine that the annual effective interest rate on the new debt is 1.856%:

Compound Period: Monthly

Nominal Annual Rate: 1.856 %*

AMORTIZATION SCHEDULE - NORMAL AMORTIZATION

	Date	Payment	Interest	Principal	Balance
1	8/1/2020	221	37	184	1,816
2	8/1/2021	221	34	187	1,629
3	8/1/2022	221	30	191	1,438
4	8/1/2023	221	27	194	1,244
5	8/1/2024	221	23	198	1,046
6	8/1/2025	221	20	201	845
7	8/1/2026	221	16	205	640
8	8/1/2027	221	12	209	429
9	8/1/2028	221	8	213	217
10	8/1/2029	221	4	217	0

*calculated by TValue

Step A4.4: Prepare the journal entries

What entries will S Company record at the date of the restructuring and for the remaining life of the debt? S Company will not record an entry at the date of the restructuring as the future cash flows are greater than the carrying amount of the debt, rather, it will account for the change in the debt prospectively. When S Company makes its annual debt payment, it will record the interest expense at the calculated effective interest rate using the amortization schedule that follows:

August 1, 2020	Dr	Interest Expense	$ 37			
	Dr	Debt	$184			
				Cr	Cash	$221
August 1, 2021	Dr	Interest expense	$ 34			
	Dr	Debt	$187			
				Cr	Cash	$221
August 1, 2022	Dr	Interest expense	$ 30			
	Dr	Debt	$ 191			
				Cr	Cash	$221
August 1, 2023	Dr	Interest expense	$ 27			
	Dr	Debt	$194			
				Cr	Cash	$221
August 1, 2024	Dr	Interest expense	$ 23			
	Dr	Debt	$198			
				Cr	Cash	$221
August 1, 2025	Dr	Interest expense	$ 20			
	Dr	Debt	$201			
				Cr	Cash	$221
August 1, 2026	Dr	Interest expense	$ 16			
	Dr	Debt	$205			
				Cr	Cash	$221
August 1, 2027	Dr	Interest expense	$ 12			
	Dr	Debt	$209			
				Cr	Cash	$221
August 1, 2028	Dr	Interest expense	$ 8			
	Dr	Debt	$213			
				Cr	Cash	$221
August 1, 2029	Dr	Interest expense	$ 4			
	Dr	Debt	$ 217			
				Cr	Cash	$221

STEP B: HAS THE TERM DEBT BEEN MODIFIED OR EXTINGUISHED UNDER ASC 470-50, DEBT MODIFICATIONS AND EXTINGUISHMENTS?

Is the term debt modified or extinguished under ASC 470-50? Note: Refer to Step C for revolving debt and lines of credit.

STEP B: Is the term debt modified or extinguished under ASC 470-50?

STEP B1: Is the present value of the cash flows under the new debt 10% or more different from the present value of the old debt's remaining cash flows using the effective interest rate of the old debt? Follow the four steps to perform the 10% test:

1. Determine the terms of the original debt (old debt) and the restructured debt (new debt).
2. Calculate the effective interest rate of the old debt, including interest payments at the contractual interest rate of the debt, debt issue costs, and debt discounts or premiums.
3. Determine, using the effective interest rate of the old debt:
   a. The present value of the remaining cash flows of the old debt; and
   b. The present value of the cash flows of the restructured terms of the new debt.
4. Calculate the percentage difference of the present value of the cash flows of the new debt and the present value of the remaining cash flows of the old debt. Is the difference at least 10%?

YES → **STEP B123E: Extinguishment**

NO ↓

STEP B2: Was an embedded conversion option, which is not bifurcated, amended such that the change in its fair value is 10% or more of the original debt's carrying amount immediately prior to the change?

YES →

NO ↓

STEP B3: Was a substantive (i.e., reasonably possible of being exercised) conversion option, which is not bifurcated, added to or eliminated from the debt instrument?

YES →

NO ↓

STEP B123M: Modification

The old and new debt instruments are NOT substantially different. The debt is modified. The difference between the old and new debt is recorded as a change in effective interest rate. Follow the three steps to account for the modification:

1. Record the entry upon modification.
   a. Expense the debt issue costs (fees paid to third parties) incurred to modify the debt.
   b. Recognize fees paid to/received from the creditor as a debt discount/premium.
   c. Record any change in the amount of the debt and cash received/paid, if applicable.
2. Calculate the effective interest rate of the modified debt.
3. Prepare the entries for the remaining life of the modified debt.

STEP B123E: Extinguishment

The old and new debt instruments are substantially different, and the old debt is extinguished. Using the basic extinguishment model, follow the four steps to account for the extinguishment:

1. Determine the fair value of the new debt.
2. Prepare the entry to write off the old debt and record the new debt. Any difference is recorded as a gain or loss in the statement of operations
   a. Write off the unamortized discount/premium (fees paid to/received from the creditor) and debt issue costs (fees paid to third parties) associated with the old debt.
   b. Capitalize the new debt issue costs (fees paid to third parties).
   c. Write off the old debt and record the new debt at fair value. Because the debt is recorded at fair value, any debt discount/premium (fees paid to/received from the creditor) is written off.
3. Calculate the effective interest rate of the new debt.
4. Prepare the entries for the remaining life of the new debt.

Introduction to Debt Extinguishment and Modification under ASC 470-50

Once the company has determined that the changes to the terms of its debt does not represent a troubled debt restructuring under ASC 470-60, then the company must assess the change for debt modification or extinguishment under ASC 470-50. While the accounting model for extinguishment is the same under ASC 470-60 and ASC 470-50 (see page 3), the accounting model for debt modification is different under the two standards. Consequently, it is important to select the appropriate model and to always perform Step A, the troubled debt restructuring test, first. As noted above, this analysis is performed only if the change in debt is between the same debtor and creditor.

If the company concludes that the change to the terms of its debt is not a troubled debt restructuring, then the change (e.g., principal, due date, interest rate, collateral, conversion terms) should be analyzed under Step B. ASC 470-50-40-10 establishes three tests for determining if the debt is "substantially different" and therefore extinguished. If any one of the three tests is passed, the debt is substantially different, and the debtor then follows the basic extinguishment model on page 3 and records a gain or loss in the statement of operations. The three tests are:

1. **Ten percent or more difference in cash flows –** The present value of the cash flows under the terms of the new debt instrument is 10% or more different from the present value of the old debt's remaining cash flows using the effective interest rate of the old debt.
2. **Embedded conversion option fair value difference is 10% or more –** The change in the fair value of an embedded conversion option that is not bifurcated (calculated as the difference between the fair value of the embedded conversion option immediately before and after the change) is at least 10% of the carrying amount of the original debt instrument immediately prior to the change; or
3. **Addition or elimination of a substantive conversion option –** A modification or an exchange of debt instruments that adds a substantive conversion option that is not bifurcated or eliminates a nonbifurcated conversion option that was substantive at the date of the modification or exchange. If this is the case, there is no need to perform tests 1 and 2.

Tests 2 and 3 apply to changes in debt instruments in circumstances in which the embedded conversion option is not bifurcated (i.e., the option is not a derivative asset or liability and may be accounted for in equity). These tests do not apply to conversion options that are separately accounted for as derivative assets or liabilities before the change, after the change, or both before and after the change. In these circumstances, any change in the fair value of the bifurcated derivative is recorded in the statement of operations as a gain or loss. Further, the change in the debt is tested for modification and extinguishment solely using the 10% cash flow test.

EXTINGUISHMENT

As noted above, if the debtor determines that the original loan has been extinguished, then the new loan should be recorded at fair value. The debtor should determine the fair value of the new debt based on the guidance in ASC 820, Fair Value Measurement. Under the ASC, the fair value of the new debt would be the price that a debtor would pay to transfer a liability in an orderly transaction between market participants. It is not appropriate to assume that the fair value of the new debt is equivalent to the carrying amount of the old debt, the face amount of the new debt, the face amount of the new debt plus/minus the premium/discount, or the present value of the new debt's cash flows calculated for purposes of the 10% cash flow test (the discount rate for the 10% test is not necessarily the market rate that should be used to calculate fair value). The fees paid to or received from the lender are not included in the fair value of the debt. As indicated above, the fair value of the debt is based on a different model (and 99.99% of the time, is a different amount) than the carrying amount of the debt plus/minus the premium/discount (based on a cost model). This means that the premium or discount is eliminated through the gain/loss line in the debt extinguishment entry. It can be challenging for a company to calculate the fair value of the new debt as the company requires its fair value interest rate. If the company has no other creditors, the fair value interest rate may be difficult to determine. In this situation, the company may want to consider hiring a valuation specialist. See the example in Step B for one approach in determining the fair value of a loan.

The four steps for accounting for and recording a debt extinguishment, Steps B123.1E – B123.3E, are:

1. Determine the fair value of the new debt.
2. Prepare the entry to write off the old debt and record the new debt. Any difference is recorded as a gain or loss in the statement of operations:
   a. Write off the unamortized discount/premium (fees paid to/received from the creditor) and debt issue costs (fees paid to third parties) associated with the old debt.
   b. Capitalize the new debt issue costs (fees paid to third parties).
   c. Write off the old debt and record the new debt at fair value. Because the debt is recorded at fair value, any debt discount/premium (fees paid to/received from the creditor) is written off.
3. Calculate the effective interest rate of the new debt.
4. Prepare the entries for the remaining life of the debt.

MODIFICATION

If a company determines that its debt has been modified rather than extinguished, under ASC 470-50-40-14, the company accounts for the change by calculating a new effective interest rate for the modified loan based on the carrying amount of the debt and the present value of the revised future cash flow payment stream. Modification does not result in recognition of a gain or loss in the statement of operations, but does impact interest expense recognized in the future. Upon a modification, the debtor should not recognize a beneficial conversion feature or reassess an existing beneficial conversion feature.

The three steps for accounting for and recording a debt modification, Steps B123.1M – B123.3M, are:

1. Record the entry upon modification.
   a. Expense the debt issue costs (fees paid to third parties) incurred to modify the debt.
   b. Recognize fees paid to/received from the creditor as a debt discount/premium.
   c. Record any change in the amount of the debt and cash received/paid, if applicable.
2. Calculate the effective interest rate of the modified debt.
3. Prepare the entries for the remaining life of the modified debt.

Details of Steps B1 – B3, follow with examples.

Step B1: Is the present value of the cash flows under the new debt 10% or more different from the present value of the old debt's remaining cash flows using the effective interest rate of the old debt?

DEFINITIONS

ASC 470-50-40 offers the following guidance and definitions to assist in performing the 10% cash flow test.

- **Discount Rate -** The discount rate to be used to calculate the present value of the cash flows is the effective interest rate, for accounting purposes, of the original debt instrument.
- **Cash Flows -** The cash flows of the new debt instrument include all cash flows specified by the terms of the new debt instrument plus any amounts paid by the debtor to the creditor less any amounts received by the debtor from the creditor as part of the exchange or modification (i.e., the change in the amount of the borrowing). If the debtor gave the creditor warrants or stock as a "sweetener" to effect the modification or exchange, these sweeteners are included in the cash flows of the new debt instrument.
- **Floating Interest Rate -** If the original debt instrument and/or the new debt instrument has a floating interest rate, then the variable rate in effect at the date of the exchange or modification is to be used to calculate the cash flows of the variable-rate instrument.
- **Callable/Puttable Debt -** If either the new debt instrument or the original debt instrument is callable or puttable, then separate cash flow analyses are to be performed assuming prepayment of the debt by exercise of the call or put.

  Assumption of prepayment by exercise of the put or call will generate the smallest change in cash flows if there is a small or no prepayment premium. If the prepayment premium upon put or call results in a change that is less than 10%, the testing will be complete, and the conclusion will be loan modification.

  Debt modification/extinguishment testing and accounting are weighted towards modification. Consequently, the cash flow assumptions that generate the smallest change would be the basis for determining whether the 10% threshold is met.

- **Contingent Payments -** If the debt instruments contain contingent payment terms or unusual interest rate terms, judgment should be used to determine the appropriate cash flows.
- **Third Party Fees -** Third party fees should not be included in the present values of the old and new debt cash flows for purposes of Step B1.3 below.
- **Change in Value of Embedded Conversion Option that Is Not Bifurcated –** If such a change results from an exchange of debt instruments or a modification in the terms of an existing debt instrument, the change is not included in the 10% cash flow test. Rather, a separate test is performed by comparing the change in the fair value of the embedded conversion option to the carrying amount of the old debt instrument immediately before the modification. See Step B2.
- **Cumulative Changes within One Year -** If within one year of the current transaction the debt has been changed without being extinguished, then the debt terms that existed before the first modification should be used to determine whether the current transaction is substantially different. For the 10% test, the company requires the amounts discounted at the effective interest rate of the original loan representing:

  1. The present value as of the first modification date of the remaining cash flows of the original loan, and
  2. The present value as of the first modification date of:

  a. The cash flows of the first modified loan from the first modification date to the second modification date, including all fees paid to the creditor and all principal payments; and

  b. The cash flows of the second modified loan from the second modification date to maturity date, including all fees paid to the creditor and all principal payments.

GUIDANCE

Cash flows to incorporate all changes in the debt – The debtor should include in the analysis changes in the cash flow due to changes in the debt principal, interest rates, and or maturity dates. Under ASC 470-50-05-4, the analysis should also include fees paid to/from the debtor and creditor, such as fees to change debt recourse features, priority of the debt, collateral, covenants, waivers, guarantees, and option features. If the debtor or creditor pays noncash fees in for example, stock, warrants, or other assets, the fair value of these noncash fees should be included in the analysis as a day one cash outflow or inflow.

Old and new principal to be on an apples-to-apples basis - If the change in debt includes a change in the principal amount, such change should be considered when performing the 10% test (i.e., increase/decrease in principal amount is included as a day-one cash inflow/outflow in the cash flows of the new debt).

To illustrate, we assume that R Company has old debt of $100 million and new debt with the same creditor of $120 million. The new debt is not a troubled debt restructuring. In performing the 10% test, the present values of the cash flows of the old debt ($100 million) and new debt ($120 million) are compared. Because the $20 million is both a day one cash inflow AND an outflow as principal is paid over the life of the loan, the net principal amounts included in the old and new debt present value calculations are the same, $100 million. If the Company failed to consider the $20 million cash inflow in the calculation of present value for the new debt, the Company could inappropriately conclude that an extinguishment occurred because the change in principal was improperly included in the present value calculation.

Companies should verify that the old and new debt present values are on an apples-to-apples basis by checking that the undiscounted principal for the old and new debt are the same. The 10% test is not a test of the change in principal; it is a test of the change in present value of a common principal amount over time including fees paid to/received from the creditor. Analysts sometimes fail to perform the principal check, and this common error can result in a conclusion of extinguishment when the loan is in fact modified.

Loan participations vs. syndications - The debt modification/extinguishment analysis differs for loan participations and loan syndications. In a loan participation, a single lead creditor makes a loan to the debtor and then transfers participation interests in the loan to other creditors. A debtor company need only perform a single cash flow analysis for a loan participation because from the company's perspective, there is only one creditor. In a loan syndication, the debtor has a credit relationship with multiple creditors, i.e., each member of the syndicate. As a result, the debtor would need to perform a cash flow analysis for each individual creditor in the syndicate in a debt modification/extinguishment analysis. In a loan participation, one lender signs the debt agreement. In a loan syndicate, each and every member of the syndicate signs the debt agreement. A simple review of the signature pages of the debt agreement provides insight into the loan participation/syndication determination.

Assessing multiple lenders - The debt modification/extinguishment analysis is typically performed on a creditor-by-creditor basis. Hence, a debtor in a syndication arrangement should also perform an analysis to determine if each creditor is, in fact, distinct. An issue may arise when creditors are individual funds with the same asset manager. Judgment should be applied to determine if these funds should be considered one combined creditor or treated as individual creditors. Factors to consider include: (1) a fund's structure and management, including the parties responsible for negotiating changes in any terms (2) who the general partner is, and (3) whether the funds are under common control.

Intermediary as debtor or creditor - If an intermediary is involved, the debt modification/extinguishment analysis differs depending on whether the intermediary is acting as the debtor's agent or as a creditor (a principal). ASC 470-50-55-1 to 5 provides guidance for distinguishing between an agent and a principal. If the intermediary is acting as an agent for the debtor company, the company and the agent are considered one, and the company should act as though it transacted directly with the creditor. If the intermediary is acting as a principal, the intermediary is treated like a third-party creditor in the debt modification/extinguishment analysis.

Four steps to the 10% cash flow test, Steps B1.1 – B1.4:

1. Determine the terms of the original debt (old debt) and the restructured debt (new debt).
2. Calculate the effective interest rate of the old debt, including interest payments at the contractual interest rate of the debt, debt issue costs (fees paid to third parties), and debt discounts/premiums (fees paid to/received from the creditor).
3. Determine, using the effective interest rate of the old debt:
   a. The present value of the remaining cash flows of the old debt; and
   b. The present value of the cash flows of the new debt.
4. Calculate the percentage difference of the present value of the cash flows of the new debt and of the present value of the remaining cash flows of the old debt. Conclude on whether the change in the debt is an extinguishment or a modification.

EXAMPLE DM.1 - 10% CASH FLOW TEST - MODIFICATION

FACTS

R Company borrows $750,000 from Lender, Inc. on January 1, 2019. The debt is due on December 31, 2023 - it is issued at par, the contractual interest rate is 8% and the fee paid to the creditor (discount) is 4% of the face amount of the debt or $30,000. Debt issue costs for lawyers and accountants amounted to $20,000. Interest is due annually.

R Company records the following entry on the date it borrows the $750,000 from Lender, Inc.:

Dr	Cash	$ 700,000			
Dr	Debt Discount	$ 30,000			
Dr	Debt Issue Costs	$ 20,000			
			Cr	Debt	$750,000

On January 1, 2022, R Company borrows an additional $375,000 from Lender, Inc. as it needs greater liquidity to finish developing and begin marketing a new product. Lender, Inc. agrees to extend the due date of the original debt three years and to make the additional debt due on the same date, December 31, 2026. Lender also agrees to maintain the interest rate of the old debt, 8%. In return, R Company provides 20,000 shares of its common stock to Lender with a fair value of $45,790. R Company pays $33,000 of debt issue costs to its accountant and attorneys for work associated with the loan modification. At January 1, 2022, R Company had amortized $27,100 of the debt discount (fees paid to the creditor) and debt issue costs (fees paid to third parties); $22,900 remained to be amortized. The debt is not callable or puttable.

For a more complex example of an amortizing loan, see Appendix A.

ANALYSIS

Step B1: 10% Cash Flow Test Analysis
Using the 10% cash flow test, is R Company's change in debt a modification or extinguishment?

Present value of the remaining cash flows of old debt	$727,270
Present value of the cash flows of modified debt	$720,771
Difference	$ 6,499
Percentage difference	0.9%

R Company concludes that the restructured debt represents a modification under the 10% cash flow test, as the percentage difference is less than 10%. R Company performed the 10% cash flow test analysis by performing the steps below.

EXAMPLE DM.1 - 10% CASH FLOW TEST - MODIFICATION (CONTINUED)

Step B1.1: Determine the terms of the old debt and the new debt

	Old Debt	New Debt
Face Amount	$750,000	$1,125,000
Contractual Interest Rate	8%	8%
Issuance/Restructure Date	01/01/2019	01/01/2022

Type of Cash Flows	Date	Amount	Amount
Debt	01/01/2019	$750,000	
Debt Discount (fees paid to the creditor)	01/01/2019	-$30,000	
Debt Issue Costs (fees paid to third parties)	01/01/2019	-$20,000	
Annual Interest Payment	12/31/2019-12/31/2023	-$60,000	
Unamortized Debt Discount (fees paid to the creditor) and Debt Issue Costs (fees paid to third parties)	01/01/2022		-$22,900
Additional Debt	01/01/2022		$375,000
Debt Discount (fees paid to the creditor) – Common Stock	01/01/2022		-$45,790
Debt Issue Costs (fees paid to third parties)	01/01/2022		-$33,000
Annual Interest Payment	12/31/2022-12/31/2026		-$90,000
Principal Payment	12/31/2023	-$750,000	
Principal Payment	12/31/2026		-$1,125,000

Step B1.2: Calculate the effective interest rate of the old debt
Include in the calculation interest payments at the contractual rate of interest, debt issue costs (fees paid to third parties), and debt discount (fees paid to the creditor).

R Company uses TValue as shown in the attached file and the schedule below to determine that the annual effective interest rate on the old debt is 9.754%:

Compound Period: Annual
Nominal Annual Rate: 9.754 %*
CASH FLOW DATA

	Event	Date	Amount	Number	Period	End Date
1	Loan	01/01/2019	750,000	1		
2	Loan	01/01/2019	30,000-	1		
3	Loan	01/01/2019	20,000-	1		
4	Payment	12/31/2019	60,000	5	Annual	12/31/2023
5	Payment	12/31/2023	750,000	1		

*calculated by TValue

Step B1.3a: Determine the PV of the remaining cash flows of the old debt using the effective interest rate of the old debt
Include in the calculation interest payments at the contractual rate of interest, debt issue costs (fees paid to third parties), and debt discount (fees paid to the creditor).

R Company uses TValue as shown in the attached file and the schedule below to determine that the annual effective interest rate on the old debt is 9.754%:

Compound Period: Annual
Nominal Annual Rate: 9.754 %*
CASH FLOW DATA

	Event	Date	Amount	Number	Period	End Date
1	Loan	01/01/2022	727,270*	1		
2	Payment	12/31/2022	60,000	2	Annual	12/31/2023
3	Payment	12/31/2023	750,000	1		

*calculated by TValue

Step B1.3b: Determine the PV of the cash flows of the new debt using the effective interest rate of the old debt
R Company checks that the principal of the old and new debt is on an apples to apples basis before proceeding. The principal of the old debt is $750,000, and the net principal of the new debt is $750,000 ($1,125,000-$375,000). As the principal is the same, R Company calculates the present value of the cash flows to the creditor for the new debt using the effective interest rate of the old debt to be $720,771.

Compound Period: Annual
Nominal Annual Rate: 9.754 %*
CASH FLOW DATA

	Event	Date	Amount	Number	Period	End Date
1	Loan	01/01/2022	720,771*	1		
2	Loan	01/01/2022	375,000	1		
3	Loan	01/01/2022	-45,790	1		
4	Payment	12/31/2022	90,000	5	Annual	12/31/2026
5	Payment	12/31/2026	1,125,000	1		

*calculated by TValue

Step B1:4: Calculate the percentage difference of the PV of the cash flows of the new debt and the PV of the remaining cash flows of the old debt
Percentage difference– $720,771/727,270 = 99.1.%, .9% different

R Company concludes that the restructured debt represents a modification as the percentage difference is less than 10%.

R Company's debt does not include a conversion option. Consequently, R Company answers Steps B2 and B3 "no" and continues to Step B123 Modification.

EXAMPLE DM.1 - 10% CASH FLOW TEST - MODIFICATION (CONTINUED)

Step B123: Modification

Step B123.1M: Record the entry upon modification
The Company incurred $33,000 in debt issue costs, fees to attorneys and accountants, for the modification. Since these fees are expensed, they are not included in the calculation of effective interest rate of the modified debt.

Dr	Debt Modification Expense	$ 33,000			
			Cr	Cash	$ 33,000

Step B123.1Mb: Recognize fees paid to/received from the creditor as a debt discount/premium
Fees paid for the creditor's third party cost are fees paid to the creditor and are not debt issue costs. The fees paid to the creditor are deducted from the loan proceeds as a debt discount. R Company issued shares of its common stock with a fair value of $45,790 to Lender, Inc. for the debt modification.

Dr	Debt Discount	$ 45,790			
			Cr	Common Stock	$ 45,790

Step B123.1Mc: Record any change in the amount of the debt and cash received/paid
At the date of modification, R Company records the incremental debt and cash received (combined with the entries for a and b above).

January 1, 2016 – Date of the Modification					
Dr	Cash	$342,000			
Dr	Debt Discount	$ 45,790			
Dr	Debt modification expense	$ 33,000			
			Cr	Debt	$375,000
			Cr	Common Stock	$ 45,790

Step B123:2M: Calculate the effective interest rate of the modified debt
The Company includes in its calculation of effective interest rate the interest payments at the contractual rate, remaining debt issue costs (fees paid to third parties) and discount (fees paid to the creditor) from the old debt, and discount (fees paid to the creditor) from the new debt, and determines the rate to be 9.600%:

		New Debt
Effective Interest Rate		9.600%
	Date	**Amount**
Old Debt	01/01/2022	$750,000
Additional New Debt	01/01/2022	$375,000
Unamortized Debt Issue Costs and Discount of Old Debt	01/01/2022	-$22,900
Fees Paid to the Creditor (Common Stock) for New Debt	01/01/2022	-$45,790
Annual Interest Payment	12/31/2022-12/31/2026	-$90,000
Principal Payment	12/31/2026	$1,125,000

R Company uses TValue as shown in the attached file and the schedule below to determine the annual effective interest rate on the new debt to be 9.594%. R Company includes the amortization information in the schedule below for purposes of preparing the journal entries.

Compound Period: Annual

Nominal Annual Rate: 9.600%*

CASH FLOW DATA

	Event	Date	Amount	Number	Period	End Date
1	Loan	01/01/2022	750,000	1		
2	Loan	01/01/2022	375,000	1		
3	Loan	01/01/2022	45,790-	1		
4	Loan	01/01/2022	22,900-	1		
5	Payment	12/31/2022	90,000	5	Annual	12/31/2026
6	Payment	12/31/2026	1,125,000	1		

*calculated by TValue

AMORTIZATION SCHEDULE - Normal Amortization

	Date	Loan	Payment	Interest	Principal	Balance
Loan	01/01/2022	750,000				750,000
Loan	01/01/2022	375,000		0	0	1,125,000
Loan	01/01/2022	45,790-		0	0	1,079,210
Loan	01/01/2022	22,900-		0	0	1,056,310
1	12/31/2022		90,000	101,130	11,130-	1,067,440
2	12/31/2023		90,000	102,476	12,476-	1,079,916
3	12/31/2024		90,000	103,673	13,673-	1,093,589
4	12/31/2025		90,000	104,986	14,986-	1,108,575
5	12/31/2026		90,000	106,425	16,425-	1,125,000
6	12/31/2026		1,125,000	0	1,125,000	0

EXAMPLE DM.1 - 10% CASH FLOW TEST - MODIFICATION (CONTINUED)

Step B123:3M: Prepare the entries for the remaining life of the modified debt
Using the amortization schedules above, R Company will record the following entries each year until the debt is paid off on December 31, 2020.

December 31, 2022	Dr	Interest Expense	$ 101,130			
				Cr	Debt Discount	$ 11,130
				Cr	Cash	$ 90,000
December 31, 2023	Dr	Interest expense	$ 102,476			
				Cr	Debt Discount	$ 12,476
				Cr	Cash	$ 90,000
December 31, 2024	Dr	Interest expense	$ 103,673			
				Cr	Debt Discount	$ 13,673
				Cr	Cash	$ 90,000
December 31, 2025	Dr	Interest expense	$ 104,986			
				Cr	Debt Discount	$ 14,986
				Cr	Cash	$ 90,000
December 31, 2026	Dr	Interest expense	$ 106,425			
	Dr	Debt	$1,125,000			
				Cr	Debt Discount	$ 16,425
				Cr	Cash	$1,215,000

EXAMPLE DM.2 - 10% CASH FLOW – MULTIPLE RESTRUCTURING WITHIN ONE YEAR

FACTS

The facts are the same as in the example above. However, at July 1, 2022, R Company borrows an additional $1,000,000 from Lender, Inc. at 8%. The lender extends the due date to December 31, 2027. The Company pays fees of $65,000 to the lender and $50,000 to the attorneys.

At July 1, 2022, R Company had amortized $32,800 of the debt discount (fees paid to the creditor) and debt issue costs (fees paid to third parties); $62,990 remained to be amortized, which includes the unamortized amount of the fees paid to the creditor for the January 1, 2022 modification.

ANALYSIS

Step B1: 10% Cash Flow Test Analysis
Using the 10% cash flow test, is R Company's change in debt a modification or extinguishment?

Present value of the remaining cash flows of old debt	$ 727,270
Present value of the cash flows of modified debt (cumulative)	$700,302
Difference	$ 26,968
Percentage difference	3.7%

EXAMPLE DM.2 - 10% CASH FLOW – MULTIPLE RESTRUCTURING WITHIN ONE YEAR (CONTINUED)

R Company concludes that the restructured debt represents a modification under the 10% cash flow test, as the percentage difference is less than 10%. R Company performed the cash flow test analysis by performing the steps below.

Step B1.1: Determine the terms of the old debt and new debt

			Old Debt	New Debt	New, New Debt
Face Amount			$750,000	$1,125,000	$2,125,000
Contractual Interest Rate			8%	8%	8%
Issuance/Restructure Date			01/01/2019	01/01/2022	07/01/2022

Type of Cash Flows	**Date**		**Amount**	**Amount**	**Amount**
Debt	01/01/2019		$750,000		
Debt Discount (fees paid to the creditor)	01/01/2019		-$30,000		
Debt Issue Costs (fees paid to third parties)	01/01/2019		-$20,000		
Annual Interest Payment	12/31/2019	-12/31/2023	-$60,000		
Unamortized Debt Discount (fees paid to the creditor) and Debt Issue Costs (fees paid to third parties)	01/01/2022			-$22,900	
Additional Debt	01/01/2022			$375,000	
Debt Discount (fees paid to the creditor) – Common Stock	01/01/2022			-$45,790	
Debt Issue Costs (fees paid to third parties)	01/01/2022			-$33,000	
Additional Debt	07/01/2022				$1,000,000
Unamortized Debt Discount (fees paid to the creditor) and Debt Issue Costs (fees paid to third parties)	07/01/2022				-$62,990
Debt Discount (fees paid to the creditor)	07/01/2022				-$65,000
Debt Issue Costs (fees paid to third parties)	07/01/2022				-$50,000
Interest Payment (a)	12/31/2022				-$130,000
Annual Interest Payment	12/31/2022	-12/31/2026		-$90,000	
Annual Interest Payment	12/31/2023	-12/31/2026			-$170,000
Principal Payment	12/31/2023		-$750,000		
Principal Payment	12/31/2026			-$1,125,000	
Principal Payment	12/31/2027				-$2,125,000

(a) Includes $45,000 of interest from 1/1/2022 to 6/30/22 and $85,000 from 7/1/2022 to 12/31/2022

EXAMPLE DM.2 - 10% CASH FLOW – MULTIPLE RESTRUCTURING WITHIN ONE YEAR (CONTINUED)

Step B1.2: Determine the effective interest rate of the old debt

R Company calculates the effective interest rate of the debt existing just prior the earliest restructuring completed within twelve months of the latest modification date (i.e., 1/1/22 is the earliest modification date during the period from 7/1/2021 to 7/1/2022). In this case, the debt was not modified between the date it was first issued (1/1/2019) and the first modification date in the twelve-month period (1/1/2022) and therefore the effective interest rate, 9.754% (see Example DM.1 for calculation) of the original debt is used.

Step B1.3: Determine the present value of the old and new debt

Step B1.3a: Determine the present value of the remaining cash flows of the old debt using the effective interest rate of the old debt

R Company calculates the present value of the remaining cash flows of the old debt using the terms that existed just prior to 1/1/2022, which in this case is the same as the original terms of the debt. Therefore, R Company calculates the present value of the old debt using TValue to be $727,270 (see Example DM.1 for calculation).

Step B1.3b: Determine the PV of the cash flows of the new debt (cash flows of first and second modified loans) using the effective interest rate of the old debt

R Company calculates the present value of the cash flows to the creditor for the first modified and the second modified debt using the effective interest rate of the old debt to be $700,302 (i.e., using a cumulative assessment).

Compound Period: Annual

Nominal Annual Rate: 9.754 %

CASH FLOW DATA

	Event	Date	Amount	Number	Period	End Date
1	Loan	01/01/2022	700,302*	1		
2	Loan	01/01/2022	375,000	1		
3	Loan	01/01/2022	-45,790	1		
4	Loan	07/01/2022	1,000,000	1		
5	Loan	07/01/2022	-65,000	1		
6	Payment	12/31/2022	130,000	1		
7	Payment	12/31/2023	170,000	5	Annual	12/31/2027
8	Payment	12/31/2027	2,125,000	1		

*calculated by TValue

Step B1:4: Calculate the percentage difference of the PV of the cash flows of the new debt and the PV of the remaining cash flows of the old debt

Percentage difference – 700,302/727,270 = 96.3.%, **3.7% different**

R Company concludes that the restructured debt represents a modification as the percentage difference is less than 10%.

R Company's debt does not include a conversion option. Consequently, R Company answers Steps B2 and B3 "no" and continues to Step 123 Modification.

Step B123: Modification

Step B123.1M: Record the entry upon modification

Step B123.1Ma: Expense the debt issues costs (fees paid to third parties) incurred to modify the debt
The Company incurred $50,000 in debt issue costs, fees to attorneys and accountants, for the modification. Since these fees are expensed, they are not included in the calculation of effective interest rate of the modified debt.

Dr	Debt Modification Expense	$ 50,000			
			Cr	Cash	$ 50,000

Step B123.1Mb: Recognize fees paid to/received from the creditor as a debt discount/premium
The fees paid to the creditor are deducted from the loan proceeds as a debt discount.

Dr	Debt Discount	$ 65,000			
			Cr	Cash	$ 65,000

Step B123.1Mc: Record any change in the amount of the debt and cash received/paid
R Company records the following entry at the date of the second modification (combined with entries a and b above).

July 1, 2022 – Date of the Modification					
Dr	Cash	$885,000			
Dr	Debt Discount	$ 65,000			
Dr	Debt modification expense	$ 50,000			
			Cr	Debt	$1,000,000

Step B123:2M: Calculate the effective interest rate of the modified debt

The Company includes in its calculation of effective interest rate the interest payments at the contractual rate, remaining debt issue costs (fees paid to third parties) and discount (fees paid to the creditor) from the old debt, and discount (fees paid to the creditor) from the new debt, and determines the rate to be 9.449%:

		New, New Debt
Effective Interest Rate		9.449%
	Date	**Amount**
Old Debt	07/01/2022	$1,125,000
Additional New Debt	07/01/2022	$1,000,000
Fees Paid to the Creditor for New, New Debt	07/01/2022	-$65,000
Unamortized Debt Issue Costs and Discount of Old Debt	07/01/2022	-$62,990
Six-Months Interest Payment	12/31/2022	-$85,000
Annual Interest Payment	12/31/2023-12/31/2027	-$170,000
Principal Payment	12/31/2027	-$2,125,000

EXAMPLE DM.2 - 10% CASH FLOW – MULTIPLE RESTRUCTURING WITHIN ONE YEAR (CONTINUED)

R Company uses TValue as shown in the attached file and the schedule below to determine the annual effective interest rate on the new debt to be 9.449%. R Company includes the amortization information in the schedule below for purposes of preparing the journal entries.

Compound Period: Exact days
Nominal Annual Rate: 9.449 %*
CASH FLOW DATA

	Event	Date	Amount	Number	Period	End Date
1	Loan	07/01/2022	1,125,000	1		
2	Loan	07/01/2022	1,000,000	1		
3	Loan	07/01/2022	65,000-	1		
4	Loan	07/01/2022	62,990-	1		
5	Payment	12/31/2022	85,000	1		
5	Payment	12/31/2022	170,000	5	Annual	12/31/2027
6	Payment	12/31/2027	2,125,000	1		

*calculated by TValue

AMORTIZATION SCHEDULE - Normal Amortization

	Date	Loan	Payment	Interest	Principal	Balance
Loan	07/01/2022	1,125,000				1,125,000
Loan	07/01/2022	1,000,000		0	0	2,000,000
Loan	07/01/2022	65,000-		0	0	2,060,000
Loan	07/01/2022	62,990-		0	0	1,997,010
1	12/31/2022		85,000	94,607	9,607-	2,006,617
2	12/31/2023		170,000	189,605	19,605-	2,026,222
3	12/31/2024		170,000	191,457	21,457-	2,047,679
4	12/31/2025		170,000	193,485	23,485-	2,071,164
5	12/31/2026		170,000	195,704	25,704-	2,096,868
6	12/31/2027		170,000	198,132	28,132-	2,125,000
7	12/31/2027		2,125,000	0	2,125,000	0

Step B123:3M: Prepare the entries for the remaining life of the modified debt

Using the amortization schedules above, R Company prepares the following journal entries to record each year until the debt is paid off on December 31, 2027.

December 31, 2022	Dr	Interest Expense	$ 94,607			
				Cr	Debt Discount	$ 9,607
				Cr	Cash	$ 85,000
December 31, 2023	Dr	Interest expense	$ 189,605			
				Cr	Debt Discount	$ 19,605
				Cr	Cash	$ 170,000
December 31, 2024	Dr	Interest expense	$ 191,457			
				Cr	Debt Discount	$ 21,457
				Cr	Cash	$ 170,000
December 31, 2025	Dr	Interest expense	$ 193,485			
				Cr	Debt Discount	$ 23,485
				Cr	Cash	$ 170,000
December 31, 2026	Dr	Interest expense	$ 195,704			
				Cr	Debt Discount	$ 25,704
				Cr	Cash	$ 170,000
December 31, 2027	Dr	Interest expense	$ 198,132			
	Dr	Debt	$2,125,000			
				Cr	Debt Discount	$ 28,132
				Cr	Cash	$2,125,000

EXAMPLE DE.1 - 10% CASH FLOW TEST - EXTINGUISHMENT

FACTS

R Company borrows $1,000,000 from Lender, Inc. on January 1, 2019. Interest is due annually and principal is due with the final payment on December 31, 2023. The debt is issued at par, the contractual interest rate is 8% and the fee paid to the creditor (the discount) is 5% of the face amount of the debt or $50,000. Debt issue costs for lawyers and accountants amounted to $40,000. R Company records the following entry on the date it borrows $1,000,000 from Lender, Inc.:

Dr	Cash	$910,000			
Dr	Debt Discount	$ 50,000			
Dr	Debt Issue Costs	$ 40,000			
			Cr	Debt	$1,000,000

On January 1, 2022, R Company negotiated with Lender, Inc. to receive an additional $900,000 and add it to the balance of the note and extend the due date to December 31, 2026. R Company determined that the new borrowing did not represent a troubled debt restructuring as the company was not having financial difficulties and Lender, Inc. did not provide any concessions. R Company borrowed the additional $900,000 from Lender as it needed capital to develop a new product.

R Company paid its accountants and attorneys $45,000 for services rendered for the new debt (debt issue costs). Lender, Inc. increased the interest rate to 12%. R Company paid Lender, Inc. a fee of $60,000 for the new debt.

At January 1, 2022, R Company had amortized $47,200 of the debt discount (fees paid to the creditor) and debt issue costs (fees paid to third parties); $42,800 remained to be amortized. The debt is not callable or puttable.

For a more complex example of an amortizing loan that, see the Appendix B.

ANALYSIS

Step B1: 10% Cash Flow Test
Using the 10% cash flow test, is R Company's change in debt a modification or extinguishment?

Present value of the remaining cash flows of old debt	$ 958,734
Present value of the cash flows of new debt	$1,174,221
Difference	$ 215,487
Percentage difference	22%

R Company concludes that the restructured debt represents an extinguishment under the 10% cash flow test, as the percentage difference is at least 10%. R Company performed the cash flow test analysis by performing the steps below.

Step B1.1: Determine the terms of the old debt and the new debt

	Old Debt	New Debt
Face Amount	$1,000,000	$1,900,000
Contractual Interest Rate	8%	12%
Issuance/Restructure Date	01/01/2019	01/01/2022

Terms	Date	Amount	Amount
Debt	01/01/2019	$1,000,000	
Debt Discount (fees paid to the creditor)	01/01/2019	-$50,000	
Debt Issue Costs (fees paid to third parties)	01/01/2019	-$40,000	
Annual Interest Payment	12/31/2019-12/31/2023	-$80,000	
Remaining Unamortized Debt Discount (fees paid to the creditor) and Debt Issue Costs (fees paid to third parties)	01/01/2022		-$42,800
Additional Debt	01/01/2022		$900,000
Debt Issue Costs (fees paid to third parties)			-$45,000
Debt Discount (fees paid to the creditor)	01/01/2022		-$60,000
Principal Payment	12/31/2023	-$1,000,000	
Annual Interest Payment	12/31/2022-12/31/2026		-$228,000
Principal Payment	12/31/2026		-$1,900,000

Step B1.2: Calculate the effective interest rate of the old debt
Include in the calculation interest payments at the contractual interest rate, debt issue costs (fees paid to third parties), and debt discount (fees paid to the creditor).

R Company uses TValue as shown in the attached file and the schedule below to determine that the annual effective interest rate on the old debt is 10.405%:

Compound Period: Annual
Nominal Annual Rate: 10.405 %*
CASH FLOW DATA

	Event	Date	Amount	Number	Period	End Date
1	Loan	01/01/2019	1,000,000	1		
2	Loan	01/01/2019	50,000-	1		
3	Loan	01/01/2019	40,000-	1		
4	Payment	12/31/2019	80,000	5	Annual	12/31/2023
5	Payment	12/31/2023	1,000,000	1		

*calculated by TValue

EXAMPLE DE.1 - 10% CASH FLOW TEST - EXTINGUISHMENT (CONTINUED)

Step B1.3a: Determine the PV of the remaining cash flows of the old debt using the effective interest rate of the old debt

R Company calculates the present value of the cash flows remaining to be paid to the creditor using the effective interest rate of the old debt to be $958,734:

Compound Period: Annual

Nominal Annual Rate: 10.405 %*

CASH FLOW DATA

	Event	Date	Amount	Number	Period	End Date
1	Payment	01/01/2022	958,734*	1		
2	Payment	12/31/2022	80,000	2	Annual	12/31/2023
3	Payment	12/31/2023	1,000,000	1		

*calculated by TValue

Step B1.3b: Determine the PV of the cash flows of the new debt using the effective interest rate of the old debt

R Company calculates the present value of the cash flows to be paid to the creditor on the new debt using the effective interest rate of the old debt to be $1,174,221:

Compound Period: Annual

Nominal Annual Rate: 10.405 %*

CASH FLOW DATA

	Event	Date	Amount	Number	Period	End Date
1	Loan	01/01/2022	1,174,221*	1		
2	Loan	01/01/2022	900,000	1		
3	Loan	01/01/2022	60,000-	1		
4	Payment	12/31/2022	228,000	5	Annual	12/31/2026
5	Payment	12/31/2026	1,900,000	1		

*calculated by TValue

Step B1.4: Calculate the percentage difference of the PV of the cash flows of the new debt and the PV of the remaining cash flows of the old debt

Percentage difference – 1,174,221/958,734 = 123%, **22% different**

R Company concludes that the restructured debt represents an extinguishment as the change was at least 10%.

R Company continues to Steps B123.1-4 Extinguishment.

Step B123.E: Extinguishment

Step B123.1E: Determine the fair value of the new debt
In accordance with ASC 470-50-40, R Company will record the new debt at fair value. The company determines its fair value interest rate to be 14% given quotes it received from other lenders before proceeding with the loan from Lender, Inc. R Company refers to the interest and principal cash flow payments of the new debt to calculate the fair value of the debt at its fair value interest rate to be $1,770,139:

	New Debt at Fair Value
Fair Value Interest Rate	14%
Issuance/Restructure Date	01/01/2022

Type of Cash Flows	Date	Amount
Annual Interest Payment	12/31/2022 -12/31/2026	-$228,000
Principal Payment	12/31/2026	-$1,900,000

Compound Period: Annual
Nominal Annual Rate: 14.000 %*
CASH FLOW DATA

	Event	Date	Amount	Number	Period	End Date
1	Loan	01/01/2022	1,770,139*	1		
2	Payment	12/31/2022	228,000	5	Annual	12/31/2026
3	Payment	12/31/2026	1,900,000	1		

*calculated by TValue

Step B123:2E: Prepare the entry to write off the old debt and record the new debt
Refer to the Facts and B123.1E for the amounts and see Excel schedule below for details.

a. **Write off the unamortized debt discount/premium (fees paid to/received from the creditor) and debt issue costs (fees paid to third parties) associated with the old debt**
The unamortized discount and debt issue costs associated with the old debt of $42,800 are written off to expense.

b. **Capitalize the new debt issue costs (fees paid to third parties)**
Debt issue costs are capitalized when a debt extinguishment has occurred. Consequently, the Company capitalized debt issue costs of $45,000 which it paid in cash.

EXAMPLE DE.1 - 10% CASH FLOW TEST - EXTINGUISHMENT (CONTINUED)

c. **Write off the old debt and record the new debt at fair value**

- **Because the debt is recorded at fair value, any debt discount/premium (fees paid to/received from the creditor) is not separately presented.**
  The old debt is written off at its face amount of $1,000,000. The new debt is recorded at cash of $900,000 and a debt with a fair value of $1,770,139 (Face of $1,900,000 less a discount of $129,861). The difference of $129,861 is recorded as a gain on debt extinguishment and netted with the other amounts written off. The fee paid to the creditor of $60,000 upon issuance of the new debt is written off (netted with the gain on debt extinguishment) since the debt is recorded at fair value.
- **How does the entry differ if the lender is a related party?**
  If the lender is a related party as defined under ASC 850-10-20, then gain upon extinguishment is recorded as a capital transaction to APIC. Refer to footnote 1 above.

R Company summarizes these entries and records the gain on extinguishment as the difference:

January 1, 2022 – Date of Extinguishment

c.	Dr	Old Debt	$1,000,000			
b.	Dr	Debt Issue Costs - new debt	$ 45,000			
c.	Dr	Cash	$ 795,000			
c.	Dr	Debt Discount - fv	$ 129,861			
				a.	Cr	Debt Issue Costs and Debt Discount – old debt $ 42,800
				c.	Cr	New Debt $1,900,000
				c.	Cr	Gain on Debt Extinguishment $ 27,061

Step B123.3E: Calculate the effective interest rate of the new debt
R Company calculates the effective interest rate of the new debt using TValue to be 14.738%. Note, since the fee paid to the creditor of $60,000 has been written off upon extinguishment, this fee is not included in the effective interest rate calculation:

	New Debt at Fair Value
Fair Value Interest Rate	14.738%
Issuance/Restructure Date	01/01/2022

Type of Cash Flows	Date	Amount
Debt	01/01/2022	$1,770,139
Debt Issue Costs	01/01/2022	-$45,000
Annual Interest Payment	12/31/2022-12/31/2026	-$228,000
Principal Payment	12/31/2026	-$1,900,000

Compound Period: Annual
Nominal Annual Rate: 14.738 %*
CASH FLOW DATA

	Event	Date	Amount	Number	Period	End Date
1	Loan	01/01/2022	1,770,139	1		
2	Loan	01/01/2022	45,000-	1		
3	Payment	12/31/2022	228,000	5	Annual	12/31/2026
4	Payment	12/31/2026	1,900,000	1		

*calculated by TValue

AMORTIZATION SCHEDULE - Normal Amortization

	Date	Loan	Payment	Interest	Principal	Balance
Loan	01/01/2022	1,779,139				1,770,139
Loan	01/01/2022	45,000-		0	0	1,725,139
1	12/31/2022		228,000	253,553	25,553-	1,750,692
2	12/31/2023		228,000	258,016	30,016-	1,780,708
3	12/31/2024		228,000	262,439	34,439-	1,815,147
4	12/31/2025		228,000	267,515	39,515-	1,854,662
5	12/31/2026		228,000	273,338	45,338-	1,900,000
6	12/31/2026		1,900,000	0	1,900,000	0

Step B123.4E: Prepare the entries for the remaining life of the new debt
Using the amortization schedules above, R Company prepares the following journal entries to record each year until the debt is paid off on December 31, 2026.

December 31, 2022	Dr	Interest expense	$ 253,553			
				Cr	Debt Issue Costs and Debt Discount	$ 25,553
				Cr	Cash	$ 228,000
December 31, 2023	Dr	Interest expense	$ 258,015			
				Cr	Debt Issue Costs and Debt Discount	$ 30,015
				Cr	Cash	$ 228,000
December 31, 2024	Dr	Interest expense	$ 262,439			
				Cr	Debt Issue Costs and Debt Discount	$ 34,439
				Cr	Cash	$ 228,000
December 31, 2025	Dr	Interest expense	$ 273,338			
	Dr	Debt	$1,900,000			
				Cr	Debt Issue Costs and Debt Discount	$ 45,338
				Cr	Cash	$2,128,000

Step B2: Has the Value of the Embedded Conversion Option Changed by More than 10%?

If a company exchanges debt with the same creditor and the change in cash flows is less than 10%, the debt still needs to be tested for extinguishment if it includes an embedded conversion option that is not bifurcated and has been amended. The new debt is considered substantially different if the change in fair value of the embedded conversion option immediately before and immediately after the modification is equal to or greater than 10% of the carrying amount of the original debt instrument immediately before the modification.

If such change is less than 10%, then the debt is considered modified, given that the company has already concluded that the debt is modified under the 10% cash flow test. If the debt is modified, the company should follow Step B123M. In this case, an increase in the fair value of the embedded conversion option reduces the carrying amount of the debt instrument, increasing the debt discount or reducing the debt premium (fees paid to or received for the creditor), with a corresponding increase in additional paid-in capital. However, a decrease in the fair value of an embedded conversion option resulting from a modification should not be recognized.

If the change in the conversion option is greater than 10%, then the debt is considered extinguished, and the steps in StepB123E are followed.

EXAMPLE DM.3 – 10% CONVERSION OPTION VALUE TEST – MODIFICATION

FACTS

R Company borrows $750,000 from Lender, Inc. on January 1, 2019. The debt is convertible at a conversion price of $75 per share or 10,000 shares. Since the company is private, the conversion options are not derivatives, and the conversion options are not bifurcated (they cannot be net settled outside the contract). On January 1, 2019, the fair value of the shares was $50 per share. The debt is due on December 31, 2023 - it is issued at par, and the contractual rate of interest is 8%. There is no discount (fees paid to the creditor) and no debt issue costs (fees paid to third parties); interest is due annually and the principal is due at the maturity date. There is no beneficial conversion feature at the date of issuance as the effective conversion price of $75 is greater than the fair value of $50 per share.

On January 1, 2022, Lender, Inc. agrees to extend the due date of the original debt three years to December 31, 2026. Lender, Inc. maintains the interest rate of the old debt, 8%. In return, R Company provides warrants to Lender for 6,667 shares of its common stock (with a fair value of $15,263) that expire on December 31, 2031. R Company included the warrants in the 10% cash flow test and determined that the debt was modified. Further, R Company reduces the conversion price on the debt from $75 per share to $70 per share. The company is still private and determines that the modified conversion options should not be bifurcated.

R Company has performed Step B1 and concluded the debt is not extinguished.

ANALYSIS

Step B2: Calculate the change in fair value of the embedded conversion option as a percentage of the carrying amount of the debt at the date of amendment

R Company now tests to see if the change in the fair value of the embedded conversion is equal to or greater than 10% of the carrying amount of the debt. R Company has a third-party valuation firm perform a valuation of the conversion option[2] immediately before and after the amendment. Per the valuation, the fair value of the incremental consideration paid by R Company for the embedded conversion option is calculated as follows, and the percentage difference is 5.2%:

Fair value of conversion option after modification	$ 589,270
Fair value of conversion option before modification	$ 550,000
Fair value of incremental consideration	$ 39,270

$39, 270/ $750,000 = 5.2%

R Company concludes that since the change in the fair value of the embedded conversion option is less than 10% of the carrying amount of the debt, the debt is modified and NOT extinguished. R Company proceeds to perform Step B123M.

2 The SEC staff has cautioned that companies must use the appropriate valuation models to value conversion features and warrants. Companies can use Black-Scholes models to value conversion options and warrants that do not have down rounds or other complex features. The staff noted that open-form models such as a lattice, binomial, or Monte Carlo simulation must be used for conversion features and warrants with down rounds and other timing and price adjustments.

Step B123.1M: Record the entry upon modification

Step B123.1Ma: Expense the debt issues costs (fees paid to third parties) incurred to modify the debt
Debt issue costs are expensed. The Company did not incur any debt issue costs.

Step B123.1Mb: Recognize fees paid to/received from the creditor as a debt discount/premium
The fees paid to the creditor are accounted for as a debt discount. R Company paid $15,263 in warrants and $39,270 in incremental value of the conversion options to Lender, Inc. for the debt modification.

Dr	Debt Discount	$54,533			
			Cr	APIC – Warrants	$15,263
			Cr	APIC – Conversion Options	$39,270

Step B123.1Mc: Record any change in the amount of the debt and cash received/paid
Since there are no other changes, the entry made is the one noted above in b.

Step B123:2M: Calculate the effective interest rate of the modified debt
The Company includes in its calculation of effective interest rate the interest payments at the contractual rate, remaining debt issue costs (fees paid to third parties) and debt discount (fees paid to the creditor) from the old debt (if any), fees paid to the creditor from the new debt, and the increase in the fair value of the conversion option, and determines the rate to be 9.92%:

Effective Interest Rate	9.920%
Issuance/Restructure Date	01/01/2022

Cash Flows	**Date**	**Amount**
Debt	01/01/2022	$750,000
Fees paid to the creditor - Warrants	01/01/2022	-$15,263
Increase in fair value of the conversion option	01/01/2022	-$39,270
Annual Interest Payment	12/31/2022-12/31/2026	-$60,000
Loan Payment	12/31/2026	-$750,000

Compound Period: Annual
Nominal Annual Rate: 9.920 %*
CASH FLOW DATA

	Event	**Date**	**Amount**	**Number**	**Period**	**End Date**
1	Loan	01/01/2022	750,000	1		
2	Loan	01/01/2022	15,263-	1		
3	Loan	01/01/2022	39,270-	1		
4	Payment	12/31/2022	60,000	5	Annual	12/31/2020
5	Payment	12/31/2026	750,000	1		

*calculated by TValue

EXAMPLE DM.3 – 10% CONVERSION OPTION VALUE TEST – MODIFICATION (CONTINUED)

AMORTIZATION SCHEDULE - Normal Amortization

	Date	Loan	Payment	Interest	Principal	Balance
Loan	01/01/2022	750,000				750,000
Loan	01/01/2022	15,263-		0	0	734,737
Loan	01/01/2022	39,270-		0	0	695,467
1	12/31/2022		60,000	68,803	8,803-	704,270
2	12/31/2023		60,000	69,865	9,865-	714,135
3	12/31/2024		60,000	70,844	10,844-	724,979
4	12/31/2025		60,000	71,919	11,919-	736,898
5	12/31/2026		60,000	73,102	13,102-	750,000
6	12/31/2026		750,000	0	750,000	0

Step B123:3M: Prepare the entries for the remaining life of the modified debt
Using the amortization schedules above, R Company prepares the following journal entries.

December 31, 2022	Dr	Interest Expense	$ 68,803			
				Cr	Debt Discount	$ 8,803
				Cr	Cash	$ 60,000
December 31, 2023	Dr	Interest expense	$ 69,865			
				Cr	Debt Discount	$ 9,865
				Cr	Cash	$ 60,000
December 31, 2024	Dr	Interest expense	$ 70,844			
				Cr	Debt Discount	$ 10,844
				Cr	Cash	$ 60,000
December 31, 2025	Dr	Interest expense	$ 71,919			
				Cr	Debt Discount	$ 11,919
				Cr	Cash	$ 60,000
December 31, 2026	Dr	Interest expense	$ 73,102			
	Dr	Debt	$750,000			
				Cr	Debt Discount	$ 13,102
				Cr	Cash	$810,000

EXAMPLE DE.2 – 10% CONVERSION OPTION VALUE TEST – EXTINGUISHMENT

FACTS

R Company borrows $750,000 from Lender, Inc. on January 1, 2019. The debt is convertible at a conversion price of $45 per share; if converted, the holder will receive 16,667 shares. The debt is not within the scope of ASC 480-10. The company is private; consequently, the conversion options are not derivatives and are not bifurcated from the debt.

On January 1, 2019, the fair value of the shares was $50 per share. The debt is due on December 31, 2023 - it is issued at par, and the contractual rate of interest is 8%. There is no discount (fees paid to the creditor) and no debt issue costs (fees paid to third parties); interest is due annually and the principal is due at the maturity date.

The debt has a beneficial conversion feature with an intrinsic value of $83,333 at the date of issuance. The beneficial conversion feature results at issuance date from the fair value of the share of $50, being greater than effective conversion price of $45, and is calculated as follows:

- Number of shares = 16,667 = ($750,000/$45)
- Benefit per shares = $5 = ($50-$45=$5)
- Total beneficial conversion feature = $83,333 = (16,667 * $5)

On January 1, 2022, Lender, Inc. agrees to extend the due date of the original debt three years to December 31, 2026. Lender, Inc. maintains the interest rate of the old debt, 8%. In return, R Company provides warrants to Lender for 6,667 shares of its common stock (with a fair value of $15,263) that expire on December 31, 2025. R Company determines that the warrants should be classified in equity. Also, R Company reduces the conversion price on the debt from $45 per share to $35 per share. The fair value of the Company's stock at the amendment date is $47. The debt is not within the scope of 480-10. The company continues as a private entity, and the modified conversion options should not be bifurcated from the debt.

R Company has performed Step B1 and concluded the debt is not extinguished under the 10% cash flow test.

ANALYSIS

Step B2: Calculate the change in fair value of the embedded conversion option as a percentage of the carrying amount of the debt at the date of amendment

R Company now tests to see if the change in the fair value of the embedded conversion is equal to or greater than 10% of the carrying amount of the debt. R Company has a third party valuation firm perform a valuation of the conversion option immediately before and after the amendment. Per the valuation, the fair value of the incremental consideration paid by R Company for the embedded conversion option is calculated as follows:

Fair value of conversion option after modification	$1,475,000
Fair value of conversion option before modification	$1,395,000
Fair value of incremental consideration	$ 80,000
Percentage change as a result of the change in conversion price	$80,000/$750,000 = 10.67%

R Company concludes that since the change in the fair value of the embedded conversion option is greater than 10% of the carrying amount of the debt, the debt is extinguished.

R Company proceeds to perform Step B123E.

EXAMPLE DE.2 – 10% CONVERSION OPTION VALUE TEST – EXTINGUISHMENT (CONTINUED)

Step B123.E: Extinguishment

Step B123.1E: Determine the fair value of the new debt
The valuation firm concludes that, the fair value of R Company's new debt is $1,475,000. There is no separate impact from the change in conversion rate as this change is built into the increase in the fair value of the debt.

R Company refers to ASC 470-20-25-13 which states. "…if a convertible debt instrument is issued at a substantial premium, there is a presumption that such premium represents paid-in capital." Since the face amount of the debt is $750,000, R Company concludes that the $725,000 premium is substantial, and records that premium to additional paid-in capital with the offset as a loss on extinguishment.

Step B1231Ei: If the convertible debt has a beneficial conversion feature at the issuance date, record the reacquisition of the BCF
If the debt does have a beneficial conversion feature at issuance and the debt is extinguished before conversion, the beneficial conversion feature is deemed reacquired at its intrinsic value at the date of extinguishment. Note that reacquisition of the beneficial conversion feature cannot and does not occur if there is no beneficial conversion feature at issuance date. There is no reacquisition even if the conversion feature becomes and stays beneficial through the extinguishment date.

On the date of extinguishment, R Company's convertible debt includes a beneficial conversion feature that has an intrinsic value of $33,333 = (16,666*($47-$45)). R Company records the reacquisition of the BCF as a reduction in APIC. The company allocates total consideration of $1,475,000, less the extinguishment date intrinsic value of the beneficial conversion feature of $33,333, or $1,441,667 to the extinguished convertible debt instrument.

R Company calculates the gain (or loss) as the difference between the consideration allocated to the convertible debt and the carrying amount of the convertible debt instrument at the extinguishment date. The amortized carrying amount of the debt at January 1, 2022 is $737,149 and represents the debt of $750,000, less the BCF issuance date discount of $83,333, plus the amortized discount for two years at an effective interest rate of 8.974% of $70,482 ($64,839+$5,643). R Company's loss on the extinguishment of its convertible debt is therefore ($1,475,000-$737,149)+ $15,263 warrants – $33,000 reacquisition of the BCF or $719,781.

The Emerging Issues Task Force (EITF) raised and discussed the above method of accounting for the reacquisition of a BCF upon extinguishment of convertible debt in EITF 00-27, but never finalized the issue. Nonetheless, we believe this method of accounting for the reacquired BCF is appropriate and generally accepted as the correct model.

Step B123:2E: Prepare the entry to write off the old debt and record the new debt
Refer to Facts and B123.1E and B123.1Ei for the amounts and see Excel schedule for details.

a. and b. Not applicable.

c. Write off the old debt and record the new debt at fair value

The Company writes off the face amount of the old debt for $750,000 and records the new debt at $750,000, its fair value of $1,475,000 less the premium recorded in APIC of $725,000. This difference of $725,000 is recorded as a component of the loss on debt extinguishment. The fee paid to the creditor, the $15,263 of warrants, is written off and added to the loss on extinguishment.

January 1, 2016 – Date of modification

Dr	a Debt	$737,149			
Dr	b Loss on extinguishment	$719,781			
Dr	c APIC – Reacquisition of BCF	$ 33,333			
			Cr	d APIC – Premium on debt	$725,000
			Cr	e APIC – Warrants	$ 15,263
			Cr	d Debt	$750,000

Step B123.3E: Calculate the effective interest rate of the new debt

The contractual interest rate of 8% is the same as the effective interest rate as there are no fees paid to the creditor or debt issue costs (fees paid to third parties).R Company refers to ASC 470-20-25-13 which states. "…if a convertible debt instrument is issued at a substantial premium, there is a presumption that such premium represents paid-in capital." Since the face amount of the debt is $750,000, R Company concludes that the $725,000 premium is substantial, and records that premium to additional paid-in capital with the offset as a loss on extinguishment.

Step B123.4E: Prepare the entries for the remaining life of the new debt

R Company prepares the following journal entries to record each year until the debt is paid off on December 31, 2020.

December 31, 2022	Dr	Interest expense	$ 60,000			
				Cr	Cash	$ 60,000
December 31, 2023	Dr	Interest expense	$ 60,000			
				Cr	Cash	$ 60,000
December 31, 2024	Dr	Interest expense	$ 60,000			
				Cr	Cash	$ 60,000
December 31, 2025	Dr	Interest expense	$ 60,000			
				Cr	Cash	$ 60,000
December 31, 2026	Dr	Debt	$750,000			
	Dr	Interest expense	$ 60,000			
				Cr	Cash	$810,000

Step B3: Has a Substantive Conversion Option Been Added or Eliminated?

Under ASC 470-50-40-10, debt is extinguished if a company amends debt with the same creditor by adding or eliminating a substantive conversion option. A substantive conversion option is defined in ASC 470-20-40-7 as a conversion feature that is reasonably possible of being exercised in the future absent the issuer's exercise of a call option. Reasonably possible is defined by reference to ASC 450-10, Contingencies.

When evaluating whether a conversion option is substantive, the debtor should consider the following factors based on ASC 470-20-40-9. For purposes of this evaluation, the holder's intent is NOT considered:

1. The fair value of the conversion option relative to the fair value of the debt instrument. The higher the relative percentage, the more likely it is that the conversion option is substantive.
2. The effective annual interest rate per the terms of the debt instrument relative to the estimated effective annual rate of a nonconvertible debt instrument with an equivalent expected term and credit risk. The lower the relative percentage, the more likely it is that the conversion option is substantive.
3. The fair value of the debt instrument relative to an instrument that is identical except for which the conversion option is not contingent. A comparison of the fair value of the debt instrument to the fair value of an identical instrument for which conversion is not contingent isolates the effect of the contingencies and may provide evidence about the substance of a conversion feature.
4. A qualitative evaluation of the conversion provisions. The nature of the conditions under which the instrument may become convertible may provide evidence that the conversion feature is substantive.

The assessment of whether the conversion feature is substantive should be based on assumptions, considerations, and market data that is available as of the issue date.

In the following fact patterns, R Company has already performed Steps B1 and B2, and the company has preliminarily concluded that the debt has not been extinguished. The company proceeds to test the change in debt under Step B3. Note that in this fact pattern, R Company could have performed Step B3 first.

ANALYZE WHETHER A CONVERSION OPTION IS SUBSTANTIVE

FACTS - CONVERSION OPTION NOT SUBSTANTIVE

R Company issues $1,000,000 of debt to Lender, Inc. on January 1, 2019 that is due on December 31, 2023. The 8% interest is due annually and the principal amount is due with the final payment on December 31, 2016. On November 30, 2023, R Company negotiates a one-year extension to the debt with UO Company. The interest rate remains unchanged, R Company does not pay any fees to UO or to third parties, but does add a conversion option to the debt. On November 30, the company's stock was trading at $3.00 a share and the conversion option is priced at $20.00 per share.

ANALYSIS - CONVERSION OPTION NOT SUBSTANTIVE

R Company concludes that the conversion option is not substantive based on its consideration of the four factors noted above. Therefore the debt is considered modified. The entry made upon modification and the entries for the remaining life of the debt are not presented here.

FACTS - CONVERSION OPTION IS SUBSTANTIVE

R Company issues $10,000,000 of debt to Lender, Inc. on January 1, 2021 that is due on December 31, 2025. The 8% interest is due annually and the principal amount is due with the final payment on December 31, 2025. On November 30, 2024, R Company negotiates a two-year extension to the debt with Lender, Inc. The interest rate remains unchanged. R Company does not pay any fees to Lender or to third parties, but does add a conversion option to the debt. On November 30, the company's stock was trading at $5 per share and the conversion option is priced at $6 per share.

ANALYSIS - CONVERSION OPTION IS SUBSTANTIVE

R Company concludes that the conversion option is substantive because it is reasonably likely of being exercised before the debt matures and the option expires. The company believes that it is reasonably likely that its share price will be greater than $6 in less than two years, and therefore the conversion option will be exercised. R Company consequently concludes that the debt is extinguished. The company will write off the old debt and record the new debt at fair value, the difference will be recorded as a gain or loss upon debt extinguishment in the statement of operations. The entry upon extinguishment is not presented here.

STEP C: HAS THE REVOLVING DEBT OR LINE-OF-CREDIT BEEN MODIFIED OR EXCHANGED?

A revolving-debt arrangement or a line-of-credit arrangement (hereafter both are referred to as an LOC) is an agreement that provides the debtor company with the option to make multiple borrowings or draw downs up to a given maximum amount, to repay part of previous borrowings, and to then borrow again under the same contract. LOCs may include both amounts drawn by the borrowing company (debt) and a commitment by the creditor to make additional amounts available to the company under defined terms (loan commitment).

The analysis of amendments to LOCs is different than that summarized above for analyzing modifications/ extinguishments of term loans. Borrowing capacity (amount of LOC multiplied by the remaining term, on an undiscounted basis) is the key used to determine the accounting for a modification to or exchange of an LOC.

Under ASC 470-50-40-21, borrowing capacity is analyzed when a debtor amends its LOC with the same creditor by:

1. Calculating the borrowing capacity of the old arrangement by multiplying the remaining term by the maximum available credit of the LOC; and
2. Calculating the borrowing capacity of the new arrangement by multiplying the term by the maximum available credit of the new LOC.

If the borrowing capacity of the new LOC is greater than or equal to that of the old LOC, then the debtor should defer and amortize over the life of the new LOC any debt issue costs (fees paid to third parties) and unamortized discount/premium (fees paid to/received from the creditor) associated with the old arrangement in addition to debt issue cost and discount/ premium associated with the new arrangement.

If the borrowing capacity of the old LOC is less than the borrowing capacity of the new LOC, then any debt issue costs and unamortized discounts/premiums associated with the old arrangement are written off in proportion to the reduction in borrowing capacity. The debt issue costs and unamortized discount/premium remaining after the proportional write off, plus the debt issue costs and debt discount/premium associated with the new arrangement are deferred and amortized over the life of the new LOC.

It is interesting to note that the model for treatment of third-party costs and lender fees for changes in the borrowing capacity of LOCs differs from that of term loans.

Since LOCs can have zero balances, discounts and deferred issuance costs are classified as assets rather than as contra-liabilities. Also, the discounts and deferred issuance costs are amortized ratably over the term of the LOCs as effective interest rates cannot be calculated. The FASB did not address this issue in ASU 2015-03, Simplifying the Presentation of Debt Issuance Costs, the update that reclassified term debt issuance costs from assets to contra-liabilities. Consequently, the SEC observer addressed this issue at the June 18, 2015 EITF meeting. The staff stated that it would not object to a company deferring and presenting lender fees and third-party costs as an asset and amortizing the costs ratably over the term of the LOC. The SEC staff announcement left practice for LOC discounts and deferred costs classification and method of amortization unchanged.

ANALYZE A CHANGE IN A LOC

FACTS

R Company established a three-year LOC arrangement on September 30, 2020 with UR Bank under which R can draw up to $10 million at an interest rate of 8% per annum on outstanding amounts. R Company incurred $33,000 in third party costs to establish the line and paid the bank a line origination fee of $45,000. R is amortizing the costs and fees on a straight line basis over the life of the line. On September 30, 2022, R Company accepts a reduction of the line to $5 million for the last year of the line in return for a reduction in interest to 5% per annum. R Company incurs $25,000 in third-party costs in association with the LOC modification and pays the bank a $12,000 fee. On September 30, 2022, R Company has $1.5 million outstanding on the LOC and $11,000 of unamortized debt issue costs (fees paid to third parties) and $15,000 of unamortized discount (fees paid to the creditor).

ANALYSIS

R Company calculates the borrowing capacity under both the old and the new LOC arrangements:

Old borrowing capacity = 1 year * $10 million = $10 million

New borrowing capacity = 1 year * $5 million = $5 million

The borrowing capacity of the new arrangement is 1/2 (change in borrowing capacity divided by the original borrowing capacity) that under the old arrangement. R Company writes off 1/2 of the unamortized debt issue costs (fees paid to third parties) ($11,000/2 = $5,500) and discount (fees paid to the creditor) ($15,000/2 = $7,500). The remaining debt issue costs of $5,500 are combined with the issuance costs of $25,000 for a total of $30,500 associated with the new arrangement and amortized over one year, the remaining life of the LOC. The remaining unamortized discount of $7,500 is combined with the $12,000 in bank fees associated with the new arrangement for a total of $19,500 and amortized over one year, the remaining life of the LOC.

ANALYZE LOAN MODIFICATIONS AND CHANGES IN LOAN FORM IN A BANK SYNDICATE – LOCS AND TERM LOANS

Generally an investment banker, or a bank acting as a syndicate administrator, arranges a loan syndicate and any modifications to the syndicate loans. When loans in a syndicate are modified, the lenders in the syndicate may increase or decrease the amount outstanding, and lenders may enter or exit the syndicate. A syndicate modification may also involve a change in the form of the loans from term to LOC, from LOC to term, or shifts in amounts from term to LOC.

When syndicated loans are modified, borrowers follow the following four steps:

1. Analyze the original and new syndicate members
    a. Identify the continuing, entering, and exiting lenders.
    b. Identify changes in loan amount, form, and maturity date.
2. Allocate the new lender fees (loan discount) and third-party costs (deferred issuance costs)
    a. Use an approach to allocate to individual lending arrangements that is reasonable and documented.
    b. Allocate the deferred issuance costs and debt discount separately, as the two are treated in a different manner in modification and extinguishment.
3. Determine whether the loans have been modified or extinguished
    a. Determine the appropriate testing and accounting model.
    b. Test for modification/extinguishment.
    c. Account for original unamortized and new deferred issuance costs and loan discounts as appropriate for the modification/extinguishment conclusion.
4. Identify the new syndicate members
    a. Capitalize costs associated with lenders that are new to the syndicate.

Step 1 - Analyze the original and new syndicate members

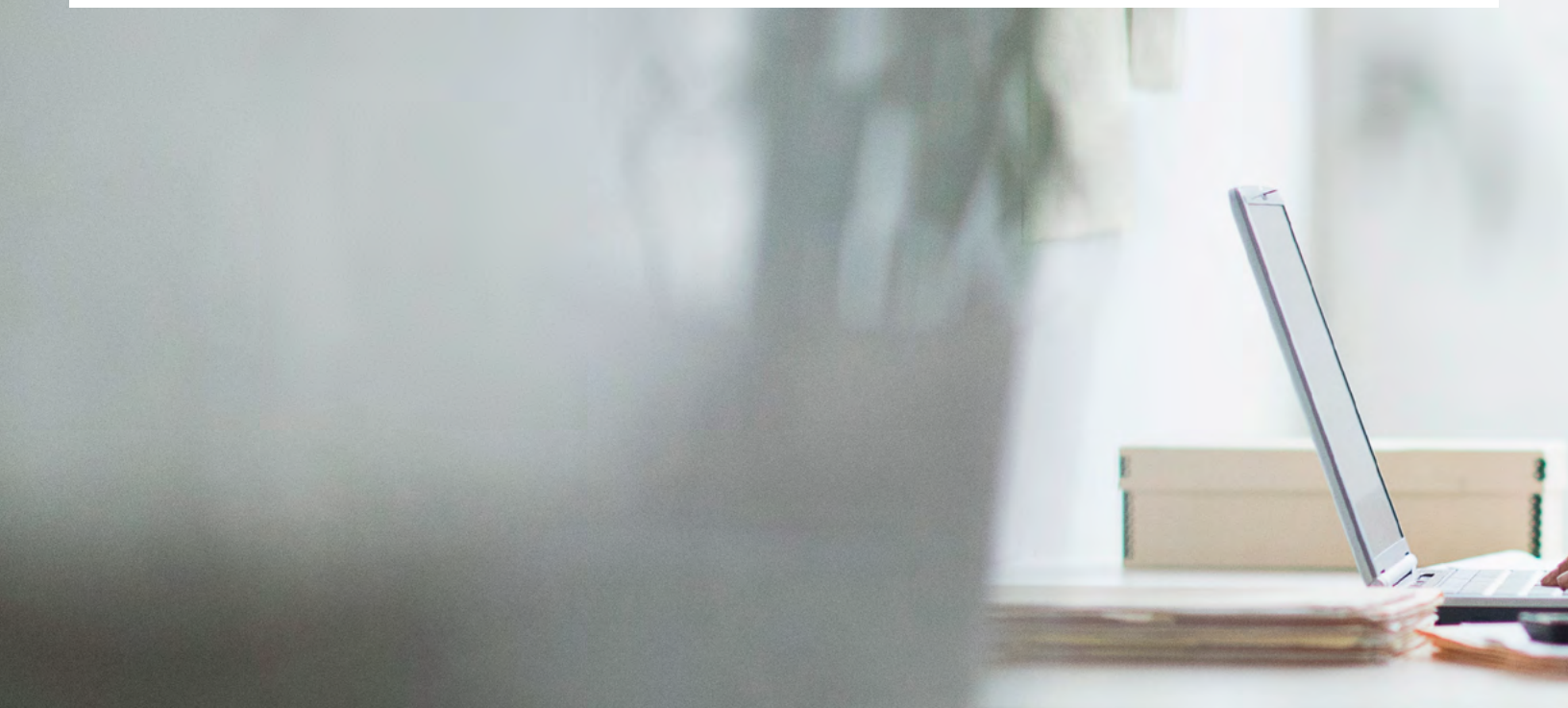
First a borrower analyzes the original and new syndicate members. Then, a borrower identifies changes in loan amount and form. For example

Lender	Original Loan Form	Original Maturity Date	Amended Loan Form	New Maturity Date	Original Loan Amount in millions	Amended Loan Amount in millions
Bank 1	Term	12/31/21	Term	12/31/25	$1	$1.5
Bank 2	LOC	12/31/21	LOC	12/31/25	$5	$10
Bank 3	LOC	12/31/21	Term	12/31/25	$2	$4
Bank 4	Term	12/31/21	LOC	12/31/25	$3	$3
Bank 5	Term	12/31/21			$4	-
Bank 6			Term	12/31/25	-	$5

In this example, each bank lender is a distinct, unrelated bank entity. However, we have seen examples in which the lenders are individual funds of the same asset manager. Judgment should be applied to determine if individual funds managed by the same asset manager are one combined creditor or individual creditors. Companies with related fund creditors should consider factors including: (1) a fund's structure and management, including the parties responsible for negotiating changes in any terms (2) who the general partner is, and (3) whether the funds are under common control.

If the lenders in our example had been X Fund LP, Y Fund LP, Q Fund LP, and Bank AB, the company would assess its multiple lenders to determine if the funds were managed by the same general partner and whether that general partner is the decision maker for the funds. Upon investigation, the company determines that X and Y Fund are managed by the same asset manager, Alphabet Funds. Alphabet makes the decisions for the two funds and manages them with the same asset parameters. Q Fund LP is managed by an unrelated entity as is Bank AB. The company determines that Fund X and Y are actually one entity because there is one general managing partner for the two funds, and the manager has the same investment objectives for the two funds. The company also determines that Q Fund LLP and Bank AB are individual creditors that are unrelated to each other and to Alphabet Funds. In this fact pattern, the company concludes that there are 3 lenders in the syndicate, (1) Alphabet Funds X and Y, (2) Q Fund LLP, and (3) Bank AB.

We return to our original Example in which Banks 1 through 6 are a syndicate that lends funds to R Company.



Step 2 - Allocate the new lender fees and third-party costs

Next, a borrower allocates fees paid to the lenders. Fees include the following lender and third- party costs:

1. Lender - Fees for the individual bank's continuing participation or entry into the syndicate. In certain syndicates, not all lenders will receive these fees. Lender fees are also termed loan discounts;
2. Lender - Fees for the benefit of all the lenders in the syndicate; and
3. Third party - Fees, often negotiated by the investment banker or syndicate administrator, for the formation and administration of the syndicate. Third party fees are also termed deferred issuance costs; and
4. Third party – Fees for attorneys and accountants.

The first type of fee is allocated solely to the individual lender. The second type is allocated to each bank in the new syndicate using a rational approach (e.g., generally allocated pro rata based on the lender's share of the total syndicated borrowings). The unamortized lender fees from the original term debt will continue to be amortized for modified debt, and expensed for extinguished term debt.

Fees on the modified debt associated with continuing lenders are expensed or capitalized depending on whether the term debt is extinguished or modified, respectively. For a LOC, if the borrowing capacity is increased, the lender fees are capitalized. If the borrowing capacity for a LOC decreases, the unamortized lender fees are written off on a pro rata basis.

Fees paid to third parties are also allocated to each bank in the new syndicate using a rational approach. Frequently, the bank acting as the investment banker is also a lender in the syndicate. The borrower should consider whether fees paid to the investment bank are being paid for third-party services or as a lender fee. The role of the bank as investment banker and\or lender is clear from the loan documentation, and the borrower should categorize the fees accordingly. Third party fees are expensed for modified term debt and capitalized for extinguished term debt. For a LOC, new third-party fees and lender fees are capitalized. If the new LOC has greater borrowing capacity, no fees are expensed. If the new LOC has less borrowing capacity, unamortized third-party costs are written off on a pro rata basis.

Step 3 – Determine whether the loans have been modified or extinguished

First a borrower determines the appropriate model for testing the change in debt. While this scenario is not specifically addressed in the Codification, we believe the following approaches are reasonable in which a borrower chooses the model that applies to the loan in its original form. If the loan was originally a term loan and became an LOC, a borrower applies the 10% cash flow test. If the loan was originally an LOC and became a term loan, a borrower applies the borrowing capacity test.

Lender	Before Change	After Change	Test Model
Continuing	Term	Term	10% cash flow
Continuing	LOC	LOC	Borrowing capacity
Continuing	LOC	Term	Borrowing capacity
Continuing	Term	LOC	10% cash flow

A borrower applies the extinguishment model to lenders that do not continue in the syndicate as term or LOC lenders. Consequently, unamortized debt issuance costs and debt discounts/premiums associated with the non-continuing lenders are written off at the time of the change.

Lender	Before Change	After Change	Accounting Model
Non-Continuing	Term	-	Extinguishment
Non-Continuing	LOC	-	Extinguishment

When the borrower applies the above to the example in Step 1, it concludes the following:

Lender	Original Loan Form	Original Maturity Date	Amended Loan Form	New Maturity Date	Original Loan Amount in millions	Amended Loan Amount in millions	Test Model	Accounting Model
Bank 1	Term	12/31/21	Term	12/31/25	$1	$1.5	10% test	
Bank 2	LOC	12/31/21	LOC	12/31/25	$5	$10	Borrowing capacity	
Bank 3	LOC	12/31/21	Term	12/31/25	$2	$4	Borrowing capacity	
Bank 4	Term	12/31/21	LOC	12/31/25	$3	$3	10% test	
Bank 5	Term	12/31/21			$4	-		Extinguishment
Bank 6			Term	12/31/25	-	$5		New Loan

Step 4 - Analyze the original and new syndicate members

The borrower identifies Bank 6 as a new lender in the syndicate in Step 4.

EXAMPLE SYN1– LOAN AMENDMENTS IN A SYNDICATE

FACTS

R Company has a term loan and LOC syndicate. The debt is not callable or puttable. When R Company entered into the loan\LOC syndicate in 2019, its product has just begun to be accepted by the market. Now R Company has a strong market presence with the product and has shown impressive revenue growth. Consequently, the Company's credit rating has improved, and when the Company began negotiating an increase in loan and LOC balance with the syndicate banks, the interest rate under discussion on the credit was either the same or lower than the original interest rate. The Company did not incur any prepayment fees but did have third party and lender fees associated with the amended\new term loans and LOCs. The changes in the syndicate are presented in the following table. The lenders agreed to accept all principal payments at the new maturity date.

Step 1: R Company analyzes the original and new syndicate members:

	OLD DEBT – ISSUED 9/30/19, DUE 9/30/22					NEW DEBT – MODIFIED 9/30/21				
	Third Party Fees	Lender Fees	Interest Rate	Form	Amount	Third Party Fees	Lender Fees	Interest Rate	Form	Amount
Bank A	$33,000	$45,000	8%	LOC	$10 million			5%	Term	$5 million
Bank B	$20,000	$30,000	8%	Term	$750,000			8%	LOC	$1.125 mil
Bank C	$40,000	$50,000	10%	Term	$1,000,000			N/A	N/A	-
Bank D	-	-	N/A	N/A	-			8%	Term	$1.9 mil
Total						$100,000	$500,000			

Step 2 – R Company allocates the new lender fees and third-party costs based on each lender's percentage of the total debt outstanding.

	FEES PAID UPON DEBT MODIFICATION ON 9/30/2021				
			Third Party Fees	Lender Fees	
	Loans	Loans – Percentage of Total	Fees by Lender - Percentage Applied to Total Fees	Fees by Lender - Percentage Applied to Total Fees	Total Lender and Third-Party Fees
Bank A	$5,000,000	62%	$62,000	$310,000	$372,000
Bank B	$1,125,000	14%	$14,000	$70,000	$84,000
Bank C	-	N/A	-	-	-
Bank D	$1,900,000	24%	$24,000	$120,000	$144,000
Total	$8,025,000		$100,000	$500,000	$600,000

EXAMPLE SYN1– LOAN AMENDMENTS IN A SYNDICATE (CONTINUED)

Before performing Step 3, R Company calculates the unamortized third party fees and lender fees remaining at the debt amendment date:

	UNAMORTIZED FEES AT 9/30/2021					
	Fees at 9/30/19		Method of Amortization	Unamortized Fees at 9/30/21		Total Unamortized Fees at 9/30/21
	Third Party Fees	Lender Fees		Third Party Fees	Lender Fees	
Bank A	$33,000	$45,000	Straight Line	$11,000	$15,000	$26,000
Bank B	$20,000	$30,000	Eff. Int. Method	$7,400	$11,000	$18,400
Bank C	$40,000	$50,000	Eff. Int. Method	$15,100	$18,900	$34,000
Bank D	-	-		-	-	-
Total				$33,500	$44,900	$78,400

ANALYSIS

Bank A – LOC to Term Loan Modification

Step 3: Determine whether the LOC with Bank A has been modified or extinguished
First, R Company determines the appropriate testing model. R concludes that the borrowing capacity test is appropriate as the loan originally was a LOC before it became a term loan, and accordingly assesses the loan modification:

Old borrowing capacity = 1 year remaining * $10 million = $10 million
New borrowing capacity = 4 years * $5 million = $20 million

Conclusion: The borrowing capacity under the new term loan is greater than the borrowing capacity of the old LOC, and consequently the change in the loan is determined to be a modification.

Fee amortization: The remaining unamortized fees from the original LOC of $26,000 are added to the new loan fees of $372,000. The total fees of $398,000 are amortized over the life of the modified loan, now term debt, using the effective interest method.

BANK A – FEES TO BE AMORTIZED AT 9/30/19				BANK A - FEE AMORTIZATION BY YEAR, FOR YEARS ENDING 9/30				
Unamortized Fees from Old Loan	Fees from New Loan	Total to Be Amortized	Effective Yield of New Debt	2022	2023	2024	2025	Total
$26,000	$372,000	$398,000	7.37%	$89,152	$95,722	$102,776	$110,350	$398,000

Step 3: Determine whether the term loan with Bank B has been modified or extinguished
First, R Company determines the appropriate testing model. R concludes that the 10% cash flow test is appropriate as the loan originally was a term loan before the loan became an LOC, and accordingly assesses the loan modification:

Step B1.1: What are the terms of R's old debt and new debt?

	Old Debt Term	New Debt LOC
Face Amount	$750,000	$1,125,000
Contractual Interest Rate	8%	8%
Issuance/Restructure Date	09/30/2019	09/30/2021

Type of Cash Flows	Date	Amount	Amount
Debt	09/30/2019	$750,000	
Debt Discount (fees paid to the creditor)	09/30/2019	-$30,000	
Debt Issue Costs (fees paid to third parties)	09/30/2019	-$20,000	
Annual Interest Payment	09/30/2020-09/30/2022	-$60,000	
Unamortized Debt Discount (fees paid to the creditor) and Debt Issue Costs (fees paid to third parties)	09/30/2021		-$18,400
Additional to LOC	09/30/2021		$375,000
Debt Discount (fees paid to the creditor)	09/30/2021		-$70,000
Debt Issue Costs (fees paid to third parties)	09/30/2021		-$14,000
Annual Interest Payment	09/30/2022		-$90,000
Reduction in LOC (a)	09/30/2022		-$100,000
Principal Payment	09/30/2022	-$750,000	
Annual Interest Payment	09/30/2023		-$88,400
Addition to LOC (a)	09/30/2023		$100,000
Annual Interest Payment	09/30/2024 & 25		-$90,000
Payment of LOC (a)	09/30/2025		-$1,125,000

(a) The Company bases the estimates on its cash flow needs over the life of the LOC. R Company knows that actual cash needs may vary from this estimate.

EXAMPLE SYN1– LOAN AMENDMENTS IN A SYNDICATE (CONTINUED)

Step B1.2: Calculate the effective interest rate of the old debt
Include in the calculation interest payments at the contractual rate of interest, debt issue costs (fees paid to third parties), and debt discount (fees paid to the creditor).

R Company uses TValue as shown in the attached file and the schedule below to determine that the annual effective interest rate on the old debt is 10.715%.

Step B1.3: Determine the present value of the old and new debt

Step B1.3a: Determine the PV of the remaining cash flows of the old debt using the effective interest rate of the old debt
R Company calculates the present value of the remaining cash flows to the creditor for the old debt using the effective interest rate of the old debt and TValue to be $731,608:

Step B1.3b: Determine the PV of the cash flows of the new debt using the effective interest rate of the old debt
R Company calculates the present value of the cash flows to the creditor for the new debt using the effective interest rate of the old debt to be $746,096. R Company estimates the draw downs on the line for this calculation. The Company bases the estimates on its cash flow needs over the life of the LOC. R Company knows that actual cash needs may vary from this estimate.

Step B1:4: Calculate the percentage difference of the PV of the cash flows of the new debt and the PV of the remaining cash flows of the old debt
Percentage difference– 746,096/731,608 = 102%, 2% different

Conclusion: R Company concludes that the restructured debt represents a modification as the percentage difference is less than 10%.

Fee amortization: The remaining unamortized fees from the original LOC of $18,400 are added to the new loan fees of $84,000. The total fees of $102,400 are amortized over the life of the modified debt, now LOC, using the straight line method.

BANK B – FEES TO BE AMORTIZED AT 9/30/21			BANK B - FEE AMORTIZATION BY YEAR, FOR YEARS ENDING 9/30				
Unamortized Fees from Old Loan	Fees from New Loan	Total to Be Amortized	2022	2023	2024	2025	Total
$18,400	$84,000	$102,400	$25,600	$25,600	$25,600	$25,600	$102,400
			$102,400/4= $25,600				

Bank C – Lender Exits the Syndicate

First, R Company determines the appropriate accounting model and concludes that extinguishment is the proper model. R summarizes the terms of the old debt:

	Old Debt Term	New Debt LOC
Face Amount	$1,000,000	$-
Contractual Interest Rate	10%	
Issuance/Restructure Date	09/30/2019	

Terms	Date	Amount	Amount
Debt	09/30/2019	$1,000,000	
Debt Discount (fees paid to the creditor)	09/30/2019	-$50,000	
Debt Issue Costs (fees paid to third parties)	09/30/2019	-$40,000	
Annual Interest Payment	09/30/2020-09/30/2022	-$100,000	
Remaining Unamortized Debt Discount (fees paid to the creditor) and Debt Issue Costs (fees paid to third parties)	09/30/2021	$34,000	
Principal Payment	09/30/2021	-$1,000,000	

When a lender leaves the syndicate, the Company applies extinguishment accounting.

Step B123:2E: Prepare the entry to write off the old debt and record the new debt

d. Write off for the unamortized debt discount/premium (fees paid to/received from the creditor) and debt issue costs (fees paid to third parties) associated with the old debt
The unamortized discount and debt issue costs associated with the old debt of $34,000 are written off to expense.

e. Capitalize the new debt issue costs (fees paid to third parties) Not applicable.

a. Write off the old debt
The old debt is written off at its carrying amount, $1,000,000. Here, the Company pays the amount in cash.

R Company summarizes these entries and records the gain on extinguishment as the difference:

September 30, 2021 – Date of Extinguishment

Dr	Old Debt	$1,000,000			
Dr	Debt Extinguishment Expense	$ 34,000			
			Cr	Debt Issue Costs and Debt Discount – old debt	$ 34,000
			Cr	Cash	$1,000,000

EXAMPLE SYN1– LOAN AMENDMENTS IN A SYNDICATE (CONTINUED)

Bank D – Lender Enters the Syndicate – New Loan

First, R Company determines that Bank D is a new lender in the syndicate and accounts for Bank D debt as a new loan. R summarizes the terms of the new debt:

	Old Debt	New Debt
Face Amount	$-	$1,900,000
Contractual Interest Rate		8%
Issuance/Restructure Date		09/30/2021

Terms	Date	Amount	Amount
Debt	09/30/2021		$1,900,000
Debt Discount (fees paid to the creditor)	09/30/2021		$120,000
Debt Issue Costs (fees paid to third parties)	09/30/2021		$24,000
Annual Interest Payment	09/30/2022-09/30/2025		$152,000
Principal Payment	09/30/2025		$1,900,000

Since the debt is a loan with a new lender, the debt is recorded as a new loan:

September 30, 2021 – Date of New Loan

Dr	Cash	$1,756,000		
Dr	Debt Discount & Deferred Issuance Costs	$ 144,000		
			Cr Debt	$1,900,000

APPENDIX A

Appendix A includes two complex examples of Step B1, the 10% Cash Flow Test. These examples are based on the base cases in the body of the Practice Aid, but include amortizing principal payments.

10% CASH FLOW TEST – AMORTIZING LOAN – MODIFICATION

FACTS

R Company borrows $750,000 from Lender, Inc. on January 1, 2019. The debt is due on December 31, 2023 - it is issued at par, the contractual interest rate is 8% and the fee paid to the creditor (discount) is 4% of the face amount of the debt or $30,000. Debt issue costs for lawyers and accountants amounted to $20,000. Interest and principal payments are due annually in the amount of $187,804.

R Company records the following entry on the date it borrows the $750,000 from Lender, Inc.:

Dr	Cash	$ 700,000			
Dr	Debt Discount	$ 30,000			
Dr	Debt Issue Costs	$ 20,000			
			Cr	Debt	$ 750,000

On January 1, 2022, R Company borrows an additional $375,000 from Lender, Inc. as it needs greater liquidity to finish developing and begin marketing a new product. Lender, Inc. agrees to extend the due date of the original debt three years and to make the additional debt due on the same date, December 31, 2026. Lender also agrees to maintain the interest rate of the old debt, 8%. In return, R Company provides 20,000 shares of its common stock to Lender with a fair value of $45,790. R Company pays $33,000 of debt issue costs to its accountant and attorneys for work associated with the loan modification. At January 1, 2022, R Company had amortized $38,107 of the debt discount (fees paid to the creditor) and debt issue costs (fees paid to third parties); $11,893 remained to be amortized. R Company had paid $415,095 of principal; $334,905 of principal remained to be paid on the outstanding debt. The debt is not callable or puttable.

For simple examples see the body of the Practice Aid.

ANALYSIS

Step B1: 10% Cash Flow Test Analysis
Using the 10% cash flow test, is R Company's change in debt a modification or extinguishment?

Present value of the remaining cash flows of old debt	$ 323,012
Present value of the cash flows of modified debt	$333,328
Difference	$ 10,316
Percentage difference	3.2%

R Company concludes that the restructured debt represents a modification under the 10% cash flow test, as the percentage difference is less than 10%. R Company performed the cash flow test analysis by performing the steps below.

Step B1.1: Determine the terms of the old debt and the new debt

	Old Debt	New Debt
Face Amount	$750,000	$709,905 ($334,905 + $375,000)
Contractual Interest Rate	8%	8%
Issuance/Restructure Date	01/01/2019	01/01/2022

Type of Cash Flows	Date	Amount	Amount
Debt	01/01/2019	$750,000	
Debt Discount (fees paid to the creditor)	01/01/2019	-$30,000	
Debt Issue Costs (fees paid to third parties)	01/01/2019	-$20,000	
Annual Payment (principal & interest)	12/31/2019 – 12/31/2023	-$187,804	
Remaining Principal	01/01/2022		$334,905
Unamortized Debt Discount (fees paid to the creditor) and Debt Issue Costs (fees paid to third parties)	01/01/2022		-$11,900
Additional Debt	01/01/2022		$375,000
Debt Discount (fees paid to the creditor) - Warrants	01/01/2022		-$45,790
Debt Issue Costs (fees paid to third parties)	01/01/2022		-$33,000
Annual Payment (principal & interest)	12/31/2022 - 12/31/2026		-$177,800

Payment Terms – Old Debt

R Company has been given a payment and amortization schedule from Lender, Inc. for the original debt of $750,000. R Company uses TValue to check the schedule, and it is shown in the attached file and below. R Company notes that the amount of the debt principal remaining at January 1, 2022 is $334,905 and the annual principal and interest payment is $187,804:

Compound Period: Annual

Nominal Annual Rate: 8.000 %

CASH FLOW DATA

	Event	Date	Amount	Number	Period	End Date
1	Loan	01/01/2019	750,000	1		
2	Payment	12/31/2019	187,804*	5	Annual	12/31/2023

*calculated by TValue

AMORTIZATION SCHEDULE - Normal Amortization

	Date	Loan	Payment	Interest	Principal
Loan	01/01/2019				750,000
1	12/31/2019	187,804	59,836	127,969	622,031
2	12/31/2020	187,804	49,763	138,042	483,990
3	12/31/2021	187,804	38,719	149,085	334,905
4	12/31/2022	187,804	26,792	161,012	173,893
5	12/31/2023	187,804	13,911	173,893	0

Payment Terms –New Debt

R Company checks the payment and amortization schedule of the new debt provided by Lender, Inc. This payment schedule includes both the remaining principal of the old debt of $334,905 and the new debt of $375,000, and calculates the annual principal and interest payment to be $177,764:

Compound Period: Annual

Nominal Annual Rate: 8.000 %

CASH FLOW DATA

	Event	Date	Amount	Number	Period	End Date
1	Loan	01/01/2022	334,905	1		
2	Loan	01/01/2022	375,000	1		
3	Payment	12/31/2022	177,764*	5	Annual	12/31/2026

*calculated by TValue

AMORTIZATION SCHEDULE - Normal Amortization

	Date	Loan	Payment	Interest	Principal	Balance
Loan	01/01/2022	334,905				334,905
Loan	01/01/2022	375,000		0	0	709,905
1	12/31/2022		177,764	56,637	121,127	588,778
2	12/31/2023		177,764	47,102	130,662	458,116
3	12/31/2024		177,764	36,649	141,115	317,001
4	12/31/2025		177,764	25,360	152,404	164,596
5	12/31/2026		177,764	13,168	164,596	0

Step B1.2: Calculate the effective interest rate of the old debt

Include in the calculation interest payments at the contractual rate of interest, debt issue costs (fees paid to third parties), and debt discount (fees paid to the creditor).

R Company uses TValue as shown in the attached file and the schedule below to determine that the annual effective interest rate is 10.675%:

Compound Period: Annual

Nominal Annual Rate: 10.675%*

CASH FLOW DATA

	Event	Date	Amount	Number	Period	End Date
1	Loan	01/01/2019	750,000	1		
2	Loan	01/01/2019	-30,000	1		
3	Loan	01/01/2019	-20,000	1		
4	Payment	12/31/2019	187,804**	5	Annual	12/31/2023

*calculated by TValue

**payment amount is calculated above under Step B1.1

Step B1.3: Determine the present value of the old and new debt

Step B1.3a: Determine the PV of the remaining cash flows of the old debt using the effective interest rate of the old debt
R Company calculates the present value of the remaining cash flows to the creditor using the effective interest rate of the old debt and TValue to be $323,097:

Compound Period: Annual

Nominal Annual Rate: 10.675%

CASH FLOW DATA

	Event	Date	Amount	Number	Period	End Date
1	Loan	01/01/2022	323,097*	1		
2	Payment	12/31/2022	187,804**	2	Annual	12/31/2023

*calculated by TValue

**payment amount is calculated above under Step B1.1

Step B1.3b: Determine the PV of the cash flows of the new debt using the effective interest rate of the old debt
R Company calculates the present value of the cash flows to the creditor for the new debt using the effective interest rate of the old debt and the annual payments of $177,800. The present value is calculated to be $333,504:

Compound Period: Annual

Nominal Annual Rate: 10.675%

CASH FLOW DATA

	Event	Date	Amount	Number	Period	End Date
1	Loan	01/01/2022	333,504*	1		
2	Loan	01/01/2022	375,000	1		
3	Loan	01/01/2022	-45,790	1		
4	Payment	12/31/2022	177,800**	5	Annual	12/31/2026

*calculated by TValue

** payment amount is calculated above under Step B1.1, rounded for ease of calculation.

Step B1:4: Calculate the percentage difference of the PV of the cash flows of the new debt and the PV of the remaining cash flows of the old debt

Percentage difference– 333,504/323,097 = 103.2%, 3.2% different

R Company concludes that the restructured debt represents a modification.

R Company's debt does not include a conversion option. Consequently, R Company answers Steps B2 and B3 “no” and continues to Step 123 Modification.

Step B123: Modification

Step B123.1M: Record the entry upon modification

Step B123.1Ma: Expense the debt issues costs (fees paid to third parties) incurred to modify the debt
Debt issue costs associated with the modified debt are expensed. The Company incurred $33,000 in debt issue costs, fees to attorneys and accountants.

Dr	Debt Modification Expense	$33,000			
			Cr	Cash	$33,000

Step B123.1Mb: Recognize fees paid to/received from the creditor as a debt discount/premium
The fees paid to the creditor are deducted from the loan proceeds as a debt discount. R Company issued shares of its common stock with a fair value of $45,790 to Lender, Inc. for the debt modification.

Dr	Debt Discount	$45,790			
			Cr	Common Stock	$45,790

Step B123.1Mc: Record any change in the amount of the debt and cash received/paid
At the date of modification, R Company records the incremental debt and cash received (combined with the entries for a and b above).

January 1, 2016 – Date of the Modification

Dr	Cash	$342,000			
Dr	Debt Discount	$ 45,790			
Dr	Debt Modification Expense	$ 33,000			
			Cr	Debt	$375,000
			Cr	Common stock	$ 45,790

Step B123:2M: Calculate the effective interest rate of the modified debt
The Company includes in its calculation of effective interest rate the interest payments at the contractual rate, remaining debt issue costs (fees paid to third parties) and discount (fees paid to the creditor) from the old debt, and discount (fees paid to the creditor) from the new debt. The Company determines the rates to be 11.3%:

	New Debt
Effective Interest Rate	11.31%

	Date	Amount
Old Debt	01/01/2022	$334,905
Additional New Debt	01/01/2022	$375,000
Unamortized Debt Issue Costs and Discount of Old Debt	01/01/2022	-$11,900
Debt Issue Costs		
Fees Paid to the Creditor (Common Stock) for New Debt	01/01/2022	-$45,790
Annual Interest & Principal Payment	12/31/2022	-$177,800
Annual Interest & Principal Payment	12/31/2023	-$177,800
Annual Interest & Principal Payment	12/31/2024	-$177,800
Annual Interest & Principal Payment	12/31/2025	-$177,800
Annual Interest & Principal Payment	12/31/2026	-$177,800

R Company uses TValue as shown in the attached file and the schedule below to determine the annual effective interest rate on the new debt (11.3%). R Company includes the amortization information in the schedules below for purposes of preparing the journal entries.

Compound Period: Annual

Nominal Annual Rate: 11.31%*

CASH FLOW DATA

	Event	Date	Amount	Number	Period	End Date
1	Loan	01/01/2022	334,905	1		
2	Loan	01/01/2022	375,000	1		
3	Loan	01/01/2022	-11,900	1		
4	Loan	01/01/2022	-45,790	1		
5	Payment	12/31/2022	177,800**	5	Annual	12/31/2026

*calculated by TValue

** payment amount is calculated above under Step B1.1

AMORTIZATION SCHEDULE - Normal Amortization

	Date	Loan	Payment	Interest	Principal	Balance
Loan	01/01/2022	334,905				334,905
Loan	01/01/2022	375,000				709,905
Loan	01/01/2022	11,900-				698,005
Loan	01/01/2022	45,790-				652,215
1	12/31/2022		177,800	73,565	104,235	547,980
2	12/31/2023		177,800	61,978	115,822	432,158
3	12/31/2024		177,800	48,878	128,922	303,236
4	12/31/2025		177,800	34,297	143,503	159,733
5	12/31/2026		177,800	18,067	159,733	0

Step B123:3M: Prepare the entries for the remaining life of the modified debt

Using the attached amortization schedule below, R Company will record the following entries each year until the debt is paid off on December 31, 2026.

December 31, 2022	Dr	Interest Expense	$ 73,565			
	Dr	Debt	$ 121,110			
				Cr	Debt Issue Cost & Discount	$ 16,875
				Cr	Cash	$177,800
December 31, 2023	Dr	Interest expense	$ 61,978			
	Dr	Debt	$130,651			
				Cr	Debt Issue Cost & Discount	$ 14,829
				Cr	Cash	$177,800
December 31, 2024	Dr	Interest expense	$ 48,878			
	Dr	Debt	$ 141,113			
				Cr	Debt Issue Cost & Discount	$ 12,191
				Cr	Cash	$177,800
December 31, 2025	Dr	Interest expense	$ 34,297			
	Dr	Debt	$152,413			
				Cr	Debt Issue Cost & Discount	$ 8,910
				Cr	Cash	$177,800
December 31, 2026	Dr	Interest expense	$ 18,066			
	Dr	Debt	$164,618			
				Cr	Debt Discount	$ 4,884
				Cr	Cash	$177,800

10% CASH FLOW TEST – AMORTIZING LOAN - EXTINGUISHMENT

FACTS

R Company borrows $1,000,000 from Lender, Inc. on January 1, 2019. Interest and principal payments are due annually over a five-year period. The final payment is due on December 31, 2023 - it is issued at par, the contractual interest rate is 8% and the fee paid to the creditor (the discount) is 5% of the face amount of the debt or $50,000. Debt issue costs for lawyers and accountants amounted to $40,000. R Company records the following entry on the date it borrows $1,000,000 from Lender, Inc.:

Dr	Cash	$ 910,000			
Dr	Debt Discount	$ 50,000			
Dr	Debt Issue Costs	$ 40,000			
			Cr	Debt	$1,000,000

On January 1, 2022, R Company negotiated with Lender, Inc. to receive an additional $900,000 and add it to the balance of the note with a due date of December 31, 2026. R Company determined that the new borrowing did not represent a troubled debt restructuring as the company was not having financial difficulties and Lender, Inc. did not provide any concessions. R Company borrowed the additional $900,000 from Lender as it needed capital to develop a new product.

R Company paid its accountants and attorneys $45,000 for services rendered for the new debt. Lender, Inc. increased the interest rate to 12%. R Company paid Lender a fee of $60,000 for the new debt.

At January 1, 2022, R Company had amortized $68,400 of the debt discount and debt issue costs; $21,600 remained to be amortized. At that date, R company had paid $553,460 of principal, $446,540 of principal remained to be paid on the outstanding debt. The debt is not callable or puttable.

ANALYSIS

Step B1: 10% Cash Flow Test
Using the 10% cash flow test, is R Company's change in debt a modification or extinguishment?

Present value of the remaining cash flows of old debt	$425,079
Present value of the cash flows of new debt	$ 517,106
Difference	$ 92,027
Percentage difference	22%

R Company concludes that the restructured debt represents an extinguishment under the 10% cash flow test, as the percentage difference is at least 10%. R Company performed the cash flow test analysis by performing the steps below.

Step B1.1: Determine the terms of the old debt and the new debt

	Old Debt	New Debt
Face Amount	$1,000,000	$1,346,540 ($446,540 + $900,000
Contractual Interest Rate	8%	12%
Issuance/Restructure Date	01/01/2019	01/01/2022

Type of Cash Flows	Date	Amount	Amount
Loan	01/01/2019	$1,000,000	
Debt Discount (fees paid to the creditor)	01/01/2019	-$50,000	
Debt Issue Costs (fees paid to third parties)	01/01/2019	-$40,000	
Annual Payment Principal & Interest	12/31/2019 – 12/31/2021	-$250,406	
Remaining Unamortized Debt Discount (fees paid to the creditor) and Debt Issue Costs (fees paid to third parties)	01/01/2022		-$21,600
Additional Loan	01/01/2022		$900,000
Debt issue costs (fees paid to third parties)			-$45,000
Debt Discount (fees paid to creditor)	01/01/2022		-$60,000
Annual Payment Principal & Interest	12/31/2022 – 12/31/2026		-$373,543

Payment Terms – Old Debt

R Company has been given a payment and amortization schedule from Private Equity Company for the original debt of $1,000,000. R Company uses TValue to check the schedule, and it is shown in the attached file and below:

Compound Period: Annual

Nominal Annual Rate: 8.000 %

CASH FLOW DATA

	Event	Date	Amount	Number	Period	End Date
1	Loan	01/01/2019	1,000,000	1		
2	Payment	12/31/2019	250,406*	5	Annual	12/31/2023

*calculated by TValue

AMORTIZATION SCHEDULE - Normal Amortization

	Date	Loan	Payment	Interest	Principal
Loan	01/01/2019				1,000,000
1	12/31/2019	250,406	79,781	170,625	829,375
2	12/31/2020	250,406	66,351	184,055	645,320
3	12/31/2021	250,406	51,626	198,780	446,540
4	12/31/2022	250,406	35,723	214,683	231,857
5	12/31/2023	250,406	18,549	231,857	0

Payment Terms –New Debt

R Company checks the payment and amortization schedule of the new debt calculated provided by Private Equity Company. This payment schedule includes both the remaining principal of the old debt of $446,540 and the new debt of $900,000, and calculated the annual principal and interest payment to be $373,434:

Compound Period: Annual

Nominal Annual Rate: 12.000 %

CASH FLOW DATA

	Event	Date	Amount	Number	Period	End Date
1	Loan	01/01/2022	446,540	1		
2	Loan	01/01/2022	900,000	1		
3	Payment	12/31/2022	373,434*	5	Annual	12/31/2026

*calculated by TValue

AMORTIZATION SCHEDULE - Normal Amortization

	Date	Loan	Payment	Interest	Principal	Balance
Loan	01/01/2022	446,540				446,540
Loan	01/01/2022	900,000		0	0	1,346,540
1	12/31/2022		373,434	161,142	212,292	1,134,248
2	12/31/2023		373,434	136,110	237,324	896,924
3	12/31/2024		373,434	107,631	265,803	631,121
4	12/31/2025		373,434	75,735	297,699	333,422
5	12/31/2026		373,434	40,012	333,422	0

Step B1.2: Calculate the effective interest rate of the old debt

Include in the calculation interest payments at the contractual rate of interest, debt issue costs (fees paid to third parties), and debt discount (fees paid to the creditor).

R Company uses TValue as shown in the attached file and the schedule below to determine that the annual effective interest rate on the old debt is 11.685%:

Compound Period: Annual

Nominal Annual Rate: 11.685 %*

CASH FLOW DATA

	Event	Date	Amount	Number	Period	End Date
1	Loan	01/01/2019	1,000,000	1		
2	Loan	01/01/2019	50,000-	1		
3	Loan	01/01/2019	40,000-	1		
4	Payment	12/31/2019	250,406	5	Annual	12/31/2023

*calculated by TValue

Step B1.3: Determine the present value of the old and new debt

Step B1.3a: Determine the PV of the remaining cash flows of the old debt using the effective interest rate of the old debt
R Company calculates the present value of the remaining cash flows to the creditor using the effective interest rate of the old debt and TValue to be $425,079:

Compound Period: Annual
Nominal Annual Rate: 11.685 %
CASH FLOW DATA

	Event	Date	Amount	Number	Period	End Date
1	Loan	01/01/2022	425,079*	1		
2	Payment	12/31/2022	250,406	2	Annual	12/31/2023

*calculated by TValue

Step B1.3b: Determine the PV of the cash flows of the new debt using the effective interest rate of the old debt
R Company calculates the present value of the cash flows to the creditor using the effective interest rate of the old debt to be $517,106:

Compound Period: Annual
Nominal Annual Rate: 11.685 %
CASH FLOW DATA

	Event	Date	Amount	Number	Period	End Date
1	Loan	01/01/2022	517,106	1		
2	Loan	01/01/2022	900,000	1		
3	Loan	01/01/2022	-60,000	1		
4	Payment	12/31/2022	373,434	5	Annual	12/31/2026

*calculated by TValue

Step B1:4: Calculate the percentage difference of the PV of the cash flows of the new debt and the PV of the remaining cash flows of the old debt

Percentage difference– 517,106/425,079 = 121.7%, 21.7% different

R Company concludes that the restructured debt represents an as the change was at least 10%.

R Company continues to Steps B123.1-4 Extinguishment.

Step B123.E: Extinguishment

Step B123.1E: Determine the fair value of the new debt
In accordance with ASC 470-50-40, R Company will record the new debt at fair value. The company determines its fair value interest rate to be 14% given quotes it received from other lenders before proceeding with the loan from Private Equity Company. R Company refers to the interest and principal cash flow payments of the new debt to calculate the fair value of the debt at its fair value interest rate to be $1,282,403:

	New Debt At Fair Value
Fair Value Interest Rate	14%
Issuance/Restructure Date	01/01/2022

Type of Cash Flows	Date	Amount
Interest & Principal Payment	12/31/2022	-$373,434
Interest & Principal Payment	12/31/2023	-$373,434
Interest & Principal Payment	12/31/2024	-$373,434
Interest & Principal Payment	12/31/2025	-$373,434
Interest & Principal Payment	12/31/2026	-$373,434

Compound Period: Annual
Nominal Annual Rate: 14.000 %
CASH FLOW DATA

	Event	Date	Amount	Number	Period	End Date
1	Loan	01/01/2022	1,282,461*	1		
2	Payment	12/31/2022	$373,434	5	Annual	12/31/2026

*calculated by TValue

Step B123:2E: Prepare the entry to write off the old debt and record the new debt
Refer to the Facts and B123.1E for the amounts and see Excel schedule below for details.

a. **Write off for the unamortized debt discount/premium (fees paid to/received from the creditor) and debt issue costs (fees paid to third parties) associated with the old debt**
The unamortized discount and debt issue costs associated with the old debt of $21,600 are written off to expense.

b. **Capitalize the new debt issue costs (fees paid to third parties)**
Debt issue costs are capitalized when a debt extinguishment has occurred. Consequently, the Company capitalized debt issue costs of $45,000 which it paid in cash.

c. **Write off the old debt and record the new debt at fair value**
The old debt is written off at its carrying amount of $446,540. The new debt is recorded at fair value of $1,282,461. This is the debt's new face amount is $1,346,540 ($900,000 new debt plus old debt of $446,540) less a discount of $64,079 to equal the fair value amount. The fee paid to the lender of $60,000 is expensed.

Once the entries are posted, the net of the $60,000 lender fee expense, plus the $21,600 expense to write off the unamortized debt issuance and discount, less the gain representing the difference between the face and fair value of the debt of $64,079, equals the net loss on extinguishment of $17,521.

R Company summarizes these entries and records the loss on extinguishment:

January 1, 2022 – Date of the Extinguishment

1.Dr	Cash	$795,000			
2.Dr	Old Debt	$446,540			
3.Dr	Debt Issue Costs	$ 45,000			
4.Dr	Debt Discount	$ 64,079			
5. Dr	Loss on Debt Extinguishment Net	$ 17,521			
			Cr	Debt	$1,346,540
			Cr	Debt Issue Costs & Debt Discount	$ 21,600

Step B123.3E: Calculate the effective interest rate of the new debt

R Company calculates the effective interest rate of the new debt using TValue to be 15.504%:

	New Debt At Fair Value
Effective Interest Rate	15.504%
Issuance/Restructure Date	01/01/2022

Type of Cash Flows	Date	Amount
Debt	01/01/2022	$1,346,540
Debt Issue Costs (fees paid to third parties)	01/01/2022	-$45,000
Debt Discount (difference between FV and CV)	01/01/2022	-$64,079
Interest & Principal Payment	12/31/2022	-$373,434
Interest & Principal Payment	12/31/2023	-$373,434
Interest & Principal Payment	12/31/2024	-$373,434
Interest & Principal Payment	12/31/2025	-$373,434
Interest & Principal Payment	12/31/2026	-$373,434

Compound Period: Annual

Nominal Annual Rate: 15.504%*

CASH FLOW DATA

	Event	Date	Amount	Number	Period	End Date
1	Loan	01/01/2022	1,346,540	1		
2	Loan	01/01/2022	-64,079	1		
3	Loan	01/01/2022	-45,000	1		
4	Payment	12/31/2022	373,434	5	Annual	12/31/2026

*calculated by TValue

AMORTIZATION SCHEDULE - Normal Amortization

	Date	Loan	Payment	Interest	Principal	Balance
Loan	1/1/2022	1,346,540				1,346,540
Loan	1/1/2022	-64,079		0	0	1,282,461
Loan	1/1/2022	-45,000		0	0	1,237,461
1	12/31/2022		373,434	191,334	182,100	1,055,361
2	12/31/2023		373,434	163,626	209,808	845,854
3	12/31/2024		373,434	131,097	242,337	603,217
4	12/31/2025		373,434	93,525	279,909	323,307
5	12/31/2026		373,434	50,127	323,307	0

Step B123.4E: Prepare the entries for the remaining life of the new debt

Using the amortization schedule in the attached file below, R Company prepares the following journal entries to record each year until the debt is paid off on December 31, 2020.

December 31, 2022	Dr	Interest Expense	$ 191,334			
	Dr	Debt	$ 212,291			
				Cr	Debt Issue Cost & Discount	$ 30,192
				Cr	Cash	$373,434
December 31, 2023	Dr	Interest expense	$ 163,626			
	Dr	Debt	$ 237,324			
				Cr	Debt Issue Cost & Discount	$ 27,515
				Cr	Cash	$373,434
December 31, 2024	Dr	Interest expense	$ 131,097			
	Dr	Debt	$265,803			
				Cr	Debt Issue Cost & Discount	$ 23,466
				Cr	Cash	$373,434
December 31, 2025	Dr	Interest expense	$ 93,525			
	Dr	Debt	$ 297,699			
				Cr	Debt Issue Cost & Discount	$ 17,790
				Cr	Cash	$373,434
December 31, 2026	Dr	Interest expense	$ 50,127			
	Dr	Debt	$333,423			
				Cr	Debt Discount	$ 10,116
				Cr	Cash	$373,434

BDO Knows **Troubled Debt Restructuring, Debt Modification and Extinguishment**

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