

# Reading 52: Introduction to Fixed-Income Valuation

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## Question #1 of 143

Question ID: 415519

The price and yield on a bond have:

- A) no relationship.
  - B) an inverse relationship.
  - C) a positive relationship.
- 

## Question #2 of 143

Question ID: 472423

An interpolated spread (I-spread) for a bond is a yield spread relative to:

- A) benchmark spot rates.
  - B) risk-free bond yields.
  - C) swap rates.
- 

## Question #3 of 143

Question ID: 415507

Assume a city issues a \$5 million bond to build a hockey rink. The bond pays 8% semiannual interest and will mature in 10 years. Current interest rates are 6%. What is the present value of this bond?

- A) \$5,000,000.
  - B) \$3,363,478.
  - C) \$5,743,874.
- 

## Question #4 of 143

Question ID: 434415

A disadvantage of G-spreads and I-spreads is that they are theoretically correct only if the spot yield curve is:

- A) downward sloping.
  - B) upward sloping.
  - C) flat.
- 

## Question #5 of 143

Question ID: 415556

The current yield on a bond is equal to:

- A) the internal rate of return
  - B) the yield to maturity.
  - C) annual interest divided by the current market price.
- 

### Question #6 of 143

Question ID: 415575

Find the yield to maturity of a 6% coupon bond, priced at \$1,115.00. The bond has 10 years to maturity and pays semi-annual coupon payments.

- A) 8.07%.
  - B) 4.56%.
  - C) 5.87%.
- 

### Question #7 of 143

Question ID: 415531

A 2-year option-free bond (par value of \$1,000) has an annual coupon of 6%. An investor determines that the spot rate of year 1 is 5% and the year 2 spot rate is 8%. Using the arbitrage-free valuation approach, the bond price is *closest* to:

- A) \$966.
  - B) \$1,039.
  - C) \$992.
- 

### Question #8 of 143

Question ID: 415568

A coupon bond which pays interest \$100 annually has a par value of \$1,000, matures in 5 years, and is selling today at a \$72 discount from par value. The yield to maturity on this bond is:

- A) 12.00%.
  - B) 7.00%.
  - C) 8.33%.
- 

### Question #9 of 143

Question ID: 415528

A 10-year spot rate is *least likely* the:

- A) appropriate discount rate on the year 10 cash flow for a 20-year bond.
- B) yield-to-maturity on a 10-year zero-coupon bond.
- C) yield-to-maturity on a 10-year coupon bond.

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**Question #10 of 143**

Question ID: 415587

A bond-equivalent yield for a money market instrument is a(n):

- A) discount yield based on a 360-day year.
  - B) add-on yield based on a 365-day year.
  - C) discount yield based on a 365-day year.
- 

**Question #11 of 143**

Question ID: 415530

Using the following spot rates for pricing the bond, what is the present value of a three-year security that pays a fixed annual coupon of 6%?

- Year 1: 5.0%
- Year 2: 5.5%
- Year 3: 6.0%

- A) 102.46.
  - B) 100.10.
  - C) 95.07.
- 

**Question #12 of 143**

Question ID: 415523

If market rates do not change, as time passes the price of a zero-coupon bond will:

- A) approach the purchase price.
  - B) approach par.
  - C) approach zero.
- 

**Question #13 of 143**

Question ID: 415551

A 6-year annual interest coupon bond was purchased one year ago. The coupon rate is 10% and par value is \$1,000. At the time the bond was bought, the yield to maturity (YTM) was 8%. If the bond is sold after receiving the first interest payment and the bond's yield to maturity had changed to 7%, the annual total rate of return on holding the bond for that year would have been:

- A) 11.95%.
  - B) 8.00%.
  - C) 7.00%.
-

### Question #14 of 143

Question ID: 415526

In which of the following conditions is the bond selling at a premium? The coupon rate:

- A) is greater than current yield, which is greater than yield-to-maturity.
  - B) current rate and yield-to-maturity are all the same.
  - C) is less than current yield, which is less than yield-to-maturity.
- 

### Question #15 of 143

Question ID: 415579

A coupon bond that pays interest annually is selling at par, matures in 5 years, and has a coupon rate of 12%. The yield to maturity on this bond is:

- A) 60.00%.
  - B) 12.00%.
  - C) 8.33%.
- 

### Question #16 of 143

Question ID: 415512

Randy Harris is contemplating whether to add a bond to his portfolio. It is a semiannual, 6.5% bond with 7 years to maturity. He is concerned about the change in value due to interest rate fluctuations and would like to know the bond's value given various scenarios. At a yield to maturity of 7.5% or 5.0%, the bond's fair value is *closest* to:

	<u>7.5%</u>	<u>5.0%</u>
A)	1,032.67	959.43
B)	974.03	1,052.36
C)	946.30	1,087.68

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### Question #17 of 143

Question ID: 415548

An investor buys a pure-discount note that matures in 146 days for \$971. The bond-equivalent yield is *closest* to:

- A) 7.5%.
  - B) 3.0%.
  - C) 1.2%.
- 

### Question #18 of 143

Question ID: 415529

Assume the following corporate spot yield curve.

- One-year rate: 5%
- Two-year rate: 6%
- Three-year rate: 7%

If a 3-year annual-pay corporate bond has a coupon of 6%, its yield to maturity is *closest* to:

- A) 7.00%.
  - B) 6.08%.
  - C) 6.92%.
- 

### Question #19 of 143

Question ID: 415489

Interest rates have fallen over the seven years since a \$1,000 par, 10-year bond was issued with a coupon of 7%. What is the present value of this bond if the required rate of return is currently four and one-half percent? (For simplicity, assume annual payments.)

- A) \$1,052.17.
  - B) \$1,068.72
  - C) \$1,044.33.
- 

### Question #20 of 143

Question ID: 415502

An investor plans to buy a 10-year, \$1,000 par value, 8% semiannual coupon bond. If the yield to maturity of the bond is 9%, the bond's value is:

- A) \$935.82.
  - B) \$934.96.
  - C) \$1,067.95.
- 

### Question #21 of 143

Question ID: 472428

An investor wants to take advantage of the 5-year spot rate, currently at a level of 4.0%. Unfortunately, the investor just invested all of his funds in a 2-year bond with a yield of 3.2%. The investor contacts his broker, who tells him that in two years he can purchase a 3-year bond and end up with the same return currently offered on the 5-year bond. What 3-year forward rate beginning two years from now will allow the investor to earn a return equivalent to the 5-year spot rate?

- A) 5.6%.
- B) 4.5%.
- C) 3.5%.

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**Question #22 of 143**

Question ID: 415544

Austin Traynor is considering buying a \$1,000 face value, semi-annual coupon bond with a quoted price of 104.75 and accrued interest since the last coupon of \$33.50. Ignoring transaction costs, how much will the seller receive at the settlement date?

- A) \$1,014.00.
  - B) \$1,047.50.
  - C) \$1,081.00.
- 

**Question #23 of 143**

Question ID: 415517

A new-issue, 15-year, \$1,000 face value 6.75% semi-annual coupon bond is priced at \$1,075. Which of the following describes the bond and the relationship of the bond's market yield to the coupon?

- A) Discount bond, required market yield is greater than 6.75%.
  - B) Premium bond, required market yield is greater than 6.75%.
  - C) Premium bond, required market yield is less than 6.75%.
- 

**Question #24 of 143**

Question ID: 442252

What is the yield to maturity (YTM) on a semiannual-bond basis of a 20-year, U.S. zero-coupon bond selling for \$300?

- A) 6.11%.
  - B) 3.06%.
  - C) 7.20%.
- 

**Question #25 of 143**

Question ID: 434413

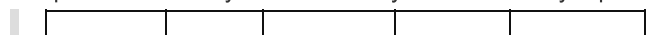
Given that the one-year spot rate is 6.05% and the two-year spot rate is 7.32%, assuming annual compounding what is the one-year forward rate starting one year from now?

- A) 8.61%.
  - B) 8.34%.
  - C) 7.87%.
- 

**Question #26 of 143**

Question ID: 636936

A 4 percent Treasury bond has 2.5 years to maturity. Spot rates are as follows:



6 month	1 year	1.5 years	2 years	2.5 years
2%	2.5%	3%	4%	6%

The note is currently selling for \$976. Determine the arbitrage profit, if any, that is possible.

- A) \$43.22.
- B) \$19.22.
- C) \$37.63.

### Question #27 of 143

Question ID: 415552

An investor purchased a 10-year zero-coupon bond with a yield to maturity of 10% and a par value of \$1,000. What would her rate of return be at the end of the year if she sells the bond? Assume the yield to maturity on the bond is 9% at the time it is sold and annual compounding periods are used.

- A) 19.42%.
- B) 15.00%.
- C) 16.00%.

### Question #28 of 143

Question ID: 415567

If a \$1,000 bond has a 14% coupon rate and a current price of 950, what is the current market yield?

- A) 14.74%.
- B) 14.00%.
- C) 15.36%.

### Question #29 of 143

Question ID: 434414

Given that the two-year spot rate is 5.89% and the one-year forward rate one-year from now is 6.05%, assuming annual compounding what is the one year spot rate?

- A) 5.73%.
- B) 5.91%.
- C) 5.67%.

### Question #30 of 143

Question ID: 460692

Neuman Company has bonds outstanding with five years to maturity that trade at a spread of +240 basis points above the five-year government bond yield. Neuman also has five-year bonds outstanding that are identical in all respects except that they are convertible into 30 shares of Neuman common stock. At which of the following spreads are the convertible bonds *most likely* to trade?

- A) +330 basis points.
  - B) +270 basis points.
  - C) +210 basis points.
- 

### Question #31 of 143

Question ID: 415569

A 12% coupon bond with semiannual payments is callable in 5 years. The call price is \$1,120. If the bond is selling today for \$1,110, what is the yield-to-call?

- A) 10.95%.
  - B) 11.25%.
  - C) 10.25%.
- 

### Question #32 of 143

Question ID: 415554

Harmon Moving has a 13.25% coupon semiannual coupon bond currently trading in the market at \$1,229.50. The bond has eight years remaining until maturity, but only two years until first call on the issue at 107.50% of \$1,000 par value. Which of the following is *closest* to the yield to first call on the bond?

- A) 9.14%.
  - B) 4.72%.
  - C) 5.16%.
- 

### Question #33 of 143

Question ID: 415533

The arbitrage-free bond valuation approach can *best* be described as the:

- A) use of a single discount factor.
  - B) use of a series of spot interest rates that reflect the current term structure.
  - C) geometric average of the spot interest rates.
- 

### Question #34 of 143

Question ID: 415515

Consider a 6-year \$1,000 par bond priced at \$1,011. The coupon rate is 7.5% paid semiannually. Six-year bonds with comparable credit quality have a yield to maturity (YTM) of 6%. Should an investor purchase this bond?



- A) Yes, the bond is undervalued by \$64.
  - B) No, the bond is overvalued by \$64.
  - C) Yes, the bond is undervalued by \$38.
- 

### Question #35 of 143

Question ID: 415595

Given the one-year spot rate  $S_1 = 0.06$  and the implied 1-year forward rates one, two, and three years from now of:  ${}_1y1_y = 0.062$ ;  ${}_2y1_y = 0.063$ ;  ${}_3y1_y = 0.065$ , what is the theoretical 4-year spot rate?

- A) 6.75%.
  - B) 6.00%.
  - C) 6.25%.
- 

### Question #36 of 143

Question ID: 415492

What value would an investor place on a 20-year, 10% annual coupon bond, if the investor required an 11% rate of return?

- A) \$879.
  - B) \$1,035
  - C) \$920.
- 

### Question #37 of 143

Question ID: 529154

The six-month spot rate is 4.0% and the 1 year spot rate is 4.5%, both stated on a semiannual bond basis. The implied six-month rate six months from now, stated on a semiannual bond basis, is *closest to*:

- A) 6%.
  - B) 4%.
  - C) 5%.
- 

### Question #38 of 143

Question ID: 415593

The six-year spot rate is 7% and the five-year spot rate is 6%. The implied one-year forward rate five years from now is *closest to*:

- A) 6.5%.
  - B) 12.0%.
  - C) 5.0%.
-

### Question #39 of 143

Question ID: 415590

A spot rate curve is *most accurately* described as yields to maturity for:

- A) money market securities.
  - B) zero-coupon bonds.
  - C) government bonds.
- 

### Question #40 of 143

Question ID: 434407

Consider a bond selling for \$1,150. This bond has 28 years to maturity, pays a 12% annual coupon, and is callable in 8 years for \$1,100. The yield to call is *closest to*:

- A) 10.55%.
  - B) 10.05%.
  - C) 9.25%.
- 

### Question #41 of 143

Question ID: 460689

A single yield used to discount all of a bond's cash flows when calculating its price is *most accurately* described as the bond's:

- A) current yield.
  - B) simple yield.
  - C) yield to maturity.
- 

### Question #42 of 143

Question ID: 415605

The zero volatility spread (Z-spread) is the spread that:

- A) is added to each spot rate on the government yield curve that will cause the present value of the bond's cash flows to equal its market price.
  - B) results when the cost of the call option in percent is subtracted from the option adjusted spread.
  - C) is added to the yield to maturity of a similar maturity government bond to equal the yield to maturity of the risky bond.
- 

### Question #43 of 143

Question ID: 415577

What is the current yield for a 5% three-year bond whose price is \$93.19?

- A) 5.00%.
  - B) 5.37%.
  - C) 2.68%.
- 

### Question #44 of 143

Question ID: 415563

An 11% coupon bond with annual payments and 10 years to maturity is callable in 3 years at a call price of \$1,100. If the bond is selling today for 975, the *yield to call* is:

- A) 14.97%.
  - B) 9.25%.
  - C) 10.26%.
- 

### Question #45 of 143

Question ID: 415572

A \$1,000 bond with an annual coupon rate of 10% has 10 years to maturity and is currently priced at \$800. What is the bond's approximate yield-to-maturity?

- A) 11.7%.
  - B) 12.6%.
  - C) 13.8%.
- 

### Question #46 of 143

Question ID: 415601

Suppose that the six-month spot rate is equal to 7% and the two-year spot rate is 6%. The one-and a half-year forward rate starting six months from now has to:

- A) be less than 6%.
  - B) be more than 6%.
  - C) lie between 6% and 7%.
- 

### Question #47 of 143

Question ID: 415578

A 20-year, 9% semi-annual coupon bond selling for \$914.20 offers a yield to maturity of:

- A) 9%.
  - B) 8%
  - C) 10%.
-

**Question #48 of 143**

Question ID: 434410

A \$1,000 par value note is priced at an annualized discount of 1.5% based on a 360-day year and has 150 days to maturity. The note will have a bond equivalent yield that is:

- A) lower than 1.5%.
  - B) higher than 1.5%.
  - C) equal to 1.5%.
- 

**Question #49 of 143**

Question ID: 415586

Sysco Foods has a 10-year bond outstanding with an annual coupon of 6.5%. If the bond is currently priced at \$1,089.25, which of the following is *closest* to the semiannual-bond basis yield?

- A) 5.42%.
  - B) 5.26%.
  - C) 5.33%.
- 

**Question #50 of 143**

Question ID: 460685

Other things equal, for option-free bonds:

- A) a bond's value is more sensitive to yield increases than to yield decreases.
  - B) the value of a low-coupon bond is less sensitive to interest rate changes than the value of a high-coupon bond.
  - C) the value of a long-term bond is more sensitive to interest rate changes than the value of a short-term bond.
- 

**Question #51 of 143**

Question ID: 415527

Which of the following statements regarding zero-coupon bonds and spot interest rates is CORRECT?

- A) If the yield to maturity on a 2-year zero coupon bond is 6%, then the 2-year spot rate is 3%.
  - B) Price appreciation creates all of the zero-coupon bond's return.
  - C) Spot interest rates will never vary across the term structure.
- 

**Question #52 of 143**

Question ID: 434406

An analyst wants to estimate the yield to maturity on a non-traded 4-year, annual pay bond rated A. Among actively traded bonds with the same rating, 3-year bonds are yielding 3.2% and 6-year bonds are yielding 5.0%. Using matrix pricing the analyst should

estimate a YTM for the non-traded bond that is *closest* to:

- A) 3.8%.
  - B) 3.6%.
  - C) 4.1%.
- 

### Question #53 of 143

Question ID: 415542

In the context of bonds, accrued interest:

- A) is discounted along with other cash flows to arrive at the dirty, or full price.
  - B) equals interest earned from the previous coupon to the sale date.
  - C) covers the part of the next coupon payment not earned by seller.
- 

### Question #54 of 143

Question ID: 415498

What is the value of a 10-year, semi-annual, 8% coupon bond with a \$1,000 face value if similar bonds are now yielding 10%?

- A) \$1,000.00.
  - B) \$875.38.
  - C) \$1,373.87.
- 

### Question #55 of 143

Question ID: 472421

A \$1,000 par, semiannual-pay bond is trading for 89.14, has a coupon rate of 8.75%, and accrued interest of \$43.72. The flat price of the bond is:

- A) \$891.40.
  - B) \$847.69.
  - C) \$935.12.
- 

### Question #56 of 143

Question ID: 415501

A coupon bond that pays interest annually has a par value of \$1,000, matures in 5 years, and has a yield to maturity of 10%. What is the value of the bond today if the coupon rate is 8%?

- A) \$924.18.
- B) \$1,500.00.
- C) \$2,077.00.

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**Question #57 of 143**

Question ID: 434408

Consider a bond selling for \$1,150. This bond has 28 years to maturity, pays a 12% annual coupon, and is callable in 8 years for \$1,100. The yield to maturity is *closest to*:

- A) 9.26%.
  - B) 10.34%.
  - C) 10.55%.
- 

**Question #58 of 143**

Question ID: 415521

If a bond sells at a discount and market rates are expected to stay the same until maturity, the price of the bond will:

- A) increase over time, approaching the par value minus the final interest payment at maturity.
  - B) remain constant until maturity.
  - C) increase over time, approaching the par value at maturity.
- 

**Question #59 of 143**

Question ID: 415546

To determine the full price of a corporate bond, a dealer is *most likely* to calculate accrued interest based on:

- A) 30-day months and 365-day years.
  - B) Actual day counts.
  - C) 30-day months and 360-day years.
- 

**Question #60 of 143**

Question ID: 485807

Matrix pricing is used primarily for pricing bonds that:

- A) differ from their benchmark bond's maturity.
  - B) differ from their benchmark bond's credit rating.
  - C) have low liquidity.
- 

**Question #61 of 143**

Question ID: 415543

Assume a bond's quoted price is 105.22 and the accrued interest is \$3.54. The bond has a par value of \$100. What is the bond's *clean* price?

- A) \$108.76.
  - B) \$103.54.
  - C) \$105.22.
- 

### Question #62 of 143

Question ID: 415564

A 15-year, 10% annual coupon bond is sold for \$1,150. It can be called at the end of 5 years for \$1,100. What is the bond's yield to call (YTC)?

- A) 8.4%.
  - B) 8.0%.
  - C) 9.2%.
- 

### Question #63 of 143

Question ID: 683891

For an option-free bond, as the yield to maturity increases, the bond price:

- A) decreases at a decreasing rate.
  - B) increases at a decreasing rate.
  - C) decreases at an increasing rate.
- 

### Question #64 of 143

Question ID: 457304

A 20-year, 10% semi-annual coupon bond selling for \$925 has a yield to maturity (YTM) of:

- A) 9.23%.
  - B) 11.23%.
  - C) 10.93%.
- 

### Question #65 of 143

Question ID: 415574

Tony Ly is a Treasury Manager with Deeter Holdings, a large consumer products holding company. The Assistant Treasurer has asked Ly to calculate the current yield and the Yield-to-first Call on a bond the company holds that has the following characteristics:

- 7 years to maturity
- \$1,000 face value
- 7.0% semi-annual coupon
- Priced to yield 9.0%
- Callable at \$1,060 in two years

If Ly calculates correctly, the current yield and yield to call are approximately:

	<u>CY</u>	<u>YTC</u>
A)	7.80%	15.82%
B)	7.80%	15.72%
C)	7.78%	15.82%

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### Question #66 of 143

Question ID: 415576

A 20 year, 8% semi-annual coupon, \$1,000 par value bond is selling for \$1,100. The bond is callable in 4 years at \$1,080. What is the bond's yield to call?

- A) 6.87.
  - B) 8.13.
  - C) 7.21.
- 

### Question #67 of 143

Question ID: 415535

Current spot rates are as follows:

- 1-Year: 6.5%
- 2-Year: 7.0%
- 3-Year: 9.2%

Which of the following statements is *most accurate*

- A) For a 3-year annual pay coupon bond, all cash flows can be discounted at 9.2% to find the bond's arbitrage-free value.
  - B) For a 3-year annual pay coupon bond, the first coupon can be discounted at 6.5%, the second coupon can be discounted at 7.0%, and the third coupon plus maturity value can be discounted at 9.2% to find the bond's arbitrage-free value.
  - C) The yield to maturity for 3-year annual pay coupon bond can be found by taking the geometric average of the 3 spot rates.
- 

### Question #68 of 143

Question ID: 415602

The one-year spot rate is 5% and the two-year spot rate is 6.5%. What is the one-year forward rate starting one year from now?

- A) 8.02%.
- B) 7.87%.
- C) 5.00%.



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**Question #69 of 143**

Question ID: 415557

PG&E has a bond outstanding with a 7% semiannual coupon that is currently priced at \$779.25. The bond has remaining maturity of 10 years but has a first put date in 4 years at the par value of \$1,000. Which of the following is *closest* to the yield to first put on the bond?

- A) 14.46%.
  - B) 7.73%.
  - C) 14.92%.
- 

**Question #70 of 143**

Question ID: 415493

Today an investor purchases a \$1,000 face value, 10%, 20-year, semi-annual bond at a discount for \$900. He wants to sell the bond in 6 years when he estimates the yields will be 9%. What is the estimate of the future price?

- A) \$946.
  - B) \$1,079.
  - C) \$1,152.
- 

**Question #71 of 143**

Question ID: 415558

A 10% coupon bond, annual payments, maturing in 10 years, is expected to make all coupon payments, but to pay only 50% of par value at maturity. What is the expected yield on this bond if the bond is purchased for \$975?

- A) 10.68%.
  - B) 8.68%.
  - C) 6.68%.
- 

**Question #72 of 143**

Question ID: 415513

A zero-coupon bond has a yield to maturity of 9.6% (annual basis) and a par value of \$1,000. If the bond matures in 10 years, today's price of the bond would be:

- A) \$422.41.
  - B) \$399.85.
  - C) \$391.54.
-

**Question #73 of 143**

Question ID: 415504

A bond with a face value of \$1,000 pays a semi-annual coupon of \$60. It has 15 years to maturity and a yield to maturity of 16% per year. What is the value of the bond?

- A) \$774.84.
  - B) \$832.88.
  - C) \$697.71.
- 

**Question #74 of 143**

Question ID: 415524

A year ago a company issued a bond with a face value of \$1,000 with an 8% coupon. Now the prevailing market yield is 10%. What happens to the bond? The bond:

- A) is traded at a market price of less than \$1,000.
  - B) is traded at a market price higher than \$1,000.
  - C) price is not affected by the change in market yield, and will continue to trade at \$1,000.
- 

**Question #75 of 143**

Question ID: 415488

Which of the following statements regarding zero-coupon bonds and spot interest rates is *most* accurate?

- A) A coupon bond can be viewed as a collection of zero-coupon bonds.
  - B) Price appreciation creates only some of the zero-coupon bond's return.
  - C) Spot interest rates will never vary across time.
- 

**Question #76 of 143**

Question ID: 415510

Consider a bond that pays an annual coupon of 5% and that has three years remaining until maturity. Assume the term structure of interest rates is flat at 6%. If the term structure of interest rates does not change over the next twelve-month interval, the bond's price change (as a percentage of par) will be *closest to*:

- A) 0.84.
  - B) -0.84.
  - C) 0.00.
- 

**Question #77 of 143**

Question ID: 415490

Assume a city issues a \$5 million bond to build a new arena. The bond pays 8% semiannual interest and will mature in 10 years. Current interest rates are 9%. What is the present value of this bond and what will the bond's value be in seven years from today?

	<u>Present Value</u>	<u>Value in 7 Years from Today</u>
A)	4,674,802	4,871,053
B)	4,674,802	4,931,276
C)	5,339,758	4,871,053



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### Question #78 of 143

Question ID: 415508

An investor buys a 25-year, 10% annual pay bond for \$900 and will sell the bond in 5 years when he estimates its yield will be 9%. The price for which the investor expects to sell this bond is *closest to*:

- A) \$1,122.
- B) \$1,091.
- C) \$964.

---

### Question #79 of 143

Question ID: 415505

An investor purchased a 6-year annual interest coupon bond one year ago. The coupon rate of interest was 10% and par value was \$1,000. At the time she purchased the bond, the yield to maturity was 8%. The amount paid for this bond one year ago was:

- A) \$1,125.53.
- B) \$1,198.07.
- C) \$1,092.46.

---

### Question #80 of 143

Question ID: 415496

Georgia Corporation has \$1,000 par value bonds with 10 years remaining maturity. The bonds carry a 7.5% coupon that is paid semi-annually. If the current yield to maturity on similar bonds is 8.2%, what is the current value of the bonds?

- A) \$952.85.
- B) \$569.52.
- C) \$1,123.89.

---

### Question #81 of 143

Question ID: 434409

If the required margin on a floating rate note is greater than the quoted margin, it is *most likely* that the:

- A) credit quality of the FRN has decreased.
- B) bond will be priced above par at the reset date.

C) reference rate on the FRN has increased.

---

### Question #82 of 143

Question ID: 415532

A 3-year option-free bond (par value of \$1,000) has an annual coupon of 9%. An investor determines that the spot rate of year 1 is 6%, the year 2 spot rate is 12%, and the year 3 spot rate is 13%. Using the arbitrage-free valuation approach, the bond price is *closest* to:

- A) \$912.
  - B) \$968.
  - C) \$1,080.
- 

### Question #83 of 143

Question ID: 460693

Bond X is a noncallable corporate bond maturing in ten years. Bond Y is also a corporate bond maturing in ten years, but Bond Y is callable at any time beginning three years from now. Both bonds carry a credit rating of AA. Based on this information:

- A) The option adjusted spread of Bond Y will be greater than its zero-volatility spread.
  - B) The zero-volatility spread of Bond X will be greater than its option-adjusted spread.
  - C) Bond Y will have a higher zero-volatility spread than Bond X.
- 

### Question #84 of 143

Question ID: 415599

If the current two-year spot rate is 6% while the one-year forward rate for one year is 5%, what is the current spot rate for one year?

- A) 5.5%.
  - B) 5.0%.
  - C) 7.0%.
- 

### Question #85 of 143

Question ID: 415549

Whitetail Company issues 73-day commercial paper that will pay \$1,004 at maturity per \$1,000 face value. The bond-equivalent yield is *closest to*:

- A) 2.02%.
- B) 2.00%.
- C) 1.97%.

---

**Question #86 of 143**

Question ID: 472422

A fixed coupon callable bond issued by Protohype Inc. is trading with a yield to maturity of 6.4%. Compared to this YTM, the bond's option-adjusted yield will be:

- A) the same.
  - B) lower.
  - C) higher.
- 

**Question #87 of 143**

Question ID: 434412

Given that the one-year spot rate is 5.76% and the 1.5-year spot rate is 6.11%, assuming semiannual compounding what is the six-month forward rate starting one year from now?

- A) 6.81%.
  - B) 6.97%.
  - C) 7.04%.
- 

**Question #88 of 143**

Question ID: 415583

A five-year bond with a 7.75% semiannual coupon currently trades at 101.245% of a par value of \$1,000. Which of the following is *closest* to the current yield on the bond?

- A) 7.53%.
  - B) 7.75%.
  - C) 7.65%.
- 

**Question #89 of 143**

Question ID: 415553

An investor is interested in buying a 4-year, \$1,000 face value bond with a 7% coupon and semi-annual payments. The bond is currently priced at \$875.60. The first put price is \$950 in 2 years. The yield to put is *closest* to:

- A) 8.7%.
  - B) 11.9%.
  - C) 10.4%.
- 

**Question #90 of 143**

Question ID: 415541

The one-year spot rate is 7.00%. One-year forward rates are 8.15% one year from today, 10.30% two years from today, and 12.00% three years from today.

The value of a 4-year, 11% annual pay, \$1,000 per bond is *closest* to:

- A) \$984.
  - B) \$1,060.
  - C) \$1,052.
- 

### Question #91 of 143

Question ID: 415499

A coupon bond that pays interest annually has a par value of \$1,000, matures in 5 years, and has a yield to maturity of 10%. What is the value of the bond today if the coupon rate is 12%?

- A) \$1,075.82.
  - B) \$1,077.22
  - C) \$927.90.
- 

### Question #92 of 143

Question ID: 415604

A Treasury bond due in one-year has a yield of 8.5%. A Treasury bond due in 5 years has a yield of 9.3%. A bond issued by General Motors due in 5 years has a yield of 9.9%. A bond issued by Exxon due in one year has a yield of 9.4%. The yield spreads on the bonds issued by Exxon and General Motors are:

	<u>Exxon</u>	<u>General Motors</u>
A)	0.9%	0.6%
B)	0.1%	1.4%
C)	0.1%	0.6%

---

### Question #93 of 143

Question ID: 415562

A coupon bond pays annual interest, has a par value of \$1,000, matures in 4 years, has a coupon rate of \$100, and a yield to maturity of 12%. The current yield on this bond is:

- A) 11.25%.
  - B) 9.50%.
  - C) 10.65%.
-

### Question #94 of 143

Question ID: 415537

An investor gathers the following information about a 2-year, annual-pay bond:

- Par value of \$1,000
- Coupon of 4%
- 1-year spot interest rate is 2%
- 2-year spot interest rate is 5%

Using the above spot rates, the current price of the bond is *closest* to:

- A) \$1,010.
  - B) \$983.
  - C) \$1,000.
- 

### Question #95 of 143

Question ID: 479062

What is the probable change in price of a 30-year semiannual 6.5% coupon, \$1000 par value bond yielding 8% if the yield decreases to 7%?

- A) \$98.83.
  - B) \$107.31.
  - C) \$106.34.
- 

### Question #96 of 143

Question ID: 415503

What value would an investor place on a 20-year, 10% annual coupon bond, if the investor required a 10% rate of return?

- A) \$1,104.
  - B) \$920.
  - C) \$1,000.
- 

### Question #97 of 143

Question ID: 415591

A yield curve for coupon bonds is composed of yields on bonds with similar:

- A) issuers.
  - B) coupon rates.
  - C) maturities.
- 

### Question #98 of 143

Question ID: 415547

An analyst using matrix pricing will estimate the value of a bond based on:

- A) a probability model for default risk.
  - B) yields to maturity of other bonds.
  - C) the issuer's cost of capital from all sources.
- 

### Question #99 of 143

Question ID: 415545

Accrued interest on a bond that is sold between coupon dates is:

- A) split between the buyer and seller.
  - B) paid to the seller.
  - C) paid to the buyer.
- 

### Question #100 of 143

Question ID: 460687

An investor who is calculating the arbitrage-free value of a government security should discount each cash flow using the:

- A) government spot rate that is specific to its maturity.
  - B) risk-free rate.
  - C) government note yield that is specific to its maturity.
- 

### Question #101 of 143

Question ID: 415584

Suppose that IBM has a \$1,000 par value bond outstanding with a 12% semiannual coupon that is currently trading at 102.25 with seven years to maturity. Which of the following is *closest* to the yield to maturity (YTM) on the bond?

- A) 11.21%.
  - B) 11.91%.
  - C) 11.52%.
- 

### Question #102 of 143

Question ID: 441030

A bond with a 12% annual coupon, 10 years to maturity and selling at 88 percent of par has a yield to maturity of:

- A) between 13% and 14%.
- B) between 10% and 12%.
- C) over 14%.



---

**Question #103 of 143**

Question ID: 415522

A 5-year bond with a 10% coupon has a present yield to maturity of 8%. If interest rates remain constant one year from now, the price of the bond will be:

- A) lower.
  - B) higher.
  - C) the same.
- 

**Question #104 of 143**

Question ID: 713758

A 30-year, 10% annual coupon bond is sold at par. It can be called at the end of 10 years for \$1,100. What is the bond's yield to call (YTC)?

- A) 10.0%.
  - B) 10.6%.
  - C) 8.9%.
- 

**Question #105 of 143**

Question ID: 460690

A semiannual-pay bond is callable in five years at \$1,080. The bond has an 8% coupon and 15 years to maturity. If an investor pays \$895 for the bond today, the yield to call is *closest to*:

- A) 12.1%.
  - B) 9.3%.
  - C) 10.2%.
- 

**Question #106 of 143**

Question ID: 415573

What is the yield to call on a bond that has an 8% coupon paid annually, \$1,000 face value, 10 years to maturity and is first callable in 6 years? The current market price is \$1,100. The call price is the face value plus 1-year's interest.

- A) 7.02%.
  - B) 6.00%.
  - C) 7.14%.
- 

**Question #107 of 143**

Question ID: 415494

Given a required yield to maturity of 6%, what is the intrinsic value of a semi-annual pay coupon bond with an 8% coupon and 15 years remaining until maturity?

- A) \$1,196.
  - B) \$1,095.
  - C) \$1,202.
- 

### Question #108 of 143

Question ID: 415596

The one-year spot rate is 6% and the one-year forward rates starting in one, two and three years respectively are 6.5%, 6.8% and 7%. What is the four-year spot rate?

- A) 6.51%.
  - B) 6.57%.
  - C) 6.58%.
- 

### Question #109 of 143

Question ID: 415520

Consider a 10%, 10-year bond sold to yield 8%. One year passes and interest rates remained unchanged (8%). What will have happened to the bond's price during this period?

- A) It will have remained constant.
  - B) It will have increased.
  - C) It will have decreased.
- 

### Question #110 of 143

Question ID: 436852

If yield to maturity and risk factors remain constant over the remainder of a coupon bond's life, and the bond is trading at a discount today, it will have a:

- A) positive current yield and a capital gain.
  - B) positive current yield, only.
  - C) negative current yield and a capital gain.
- 

### Question #111 of 143

Question ID: 415559

A 20-year, 9% annual coupon bond selling for \$1,098.96 offers a yield of:

- A) 10%.
- B) 8%.

C) 9%.

---

### Question #112 of 143

Question ID: 415518

A 10-year, \$1,000 face value 8% semi-annual coupon bond is priced at \$950. Which of the following statements about this bond is *most accurate*?

- A) The current market required rate is less than the coupon rate.
  - B) The bond is selling at a discount.
  - C) The bond is selling at a premium.
- 

### Question #113 of 143

Question ID: 415588

The margin above or below LIBOR that is used to determine a floating-rate note's coupon payments is *most accurately* described as its:

- A) quoted margin.
  - B) required margin.
  - C) discount margin.
- 

### Question #114 of 143

Question ID: 485808

An investor purchases a 5-year, A-rated, 7.95% coupon, semiannual-pay corporate bond at a yield to maturity of 8.20%. The bond is callable at 102 in three years. The bond's yield to call is *closest to*:

- A) 8.6%.
  - B) 8.3%.
  - C) 8.9%.
- 

### Question #115 of 143

Question ID: 415538

Given the following spot rate curve:

Spot Rate

1-yr zero = 9.50%

2-yr zero = 8.25%

3-yr zero = 8.00%

4-yr zero = 7.75%

5-yr zero = 7.75%

What will be the market price of a five-year, 9% annual coupon rate bond?

- A) \$1,067.78.
  - B) \$1,047.68.
  - C) \$1,000.00.
- 

### Question #116 of 143

Question ID: 460684

Consider a \$1,000-face value, 12-year, 8%, semiannual coupon bond with a YTM of 10.45%. The change in value for a decrease in yield of 38 basis points is:

- A) \$21.18.
  - B) \$23.06.
  - C) \$22.76.
- 

### Question #117 of 143

Question ID: 415540

Assume that a callable bond's call period starts two years from now with a call price of \$102.50. Also assume that the bond pays an annual coupon of 6% and the term structure is flat at 5.5%. Which of the following is the price of the bond assuming that it is called on the first call date?

- A) \$103.17.
  - B) \$102.50.
  - C) \$100.00.
- 

### Question #118 of 143

Question ID: 460691

Which of the following adjustments is *most likely* to be made to the day count convention when calculating corporate bond yield spreads to government bond yields?

- A) Adjust both the corporate and government bond yields to actual months and years.
  - B) Adjust the government bond yield to actual months and years.
  - C) Adjust the corporate bond yield to actual months and years.
- 

### Question #119 of 143

Question ID: 415603

The 3-year spot rate is 10%, and the 4-year spot rate is 10.5%. What is the 1-year forward rate 3 years from now?

- A) 11.0%.
- B) 10.0%.

C) 12.0%.

---

### Question #120 of 143

Question ID: 415514

A zero-coupon bond matures three years from today, has a par value of \$1,000 and a yield to maturity of 8.5% (assuming semi-annual compounding). What is the current value of this issue?

- A) \$782.91.
  - B) \$779.01.
  - C) \$78.29.
- 

### Question #121 of 143

Question ID: 415594

Suppose the 3-year spot rate is 12.1% and the 2-year spot rate is 11.3%. Which of the following statements concerning forward and spot rates is *most* accurate? The 1-year:

- A) forward rate two years from today is 13.7%.
  - B) forward rate two years from today is 13.2%.
  - C) forward rate one year from today is 13.7%.
- 

### Question #122 of 143

Question ID: 415571

Which of the following describes the yield to worst? The:

- A) lowest of all possible prices on the bond.
  - B) lowest of all possible yields to call.
  - C) yield given default on the bond.
- 

### Question #123 of 143

Question ID: 415589

The Treasury spot rate yield curve is *closest* to which of the following curves?

- A) Par bond yield curve.
  - B) Forward yield curve rate.
  - C) Zero-coupon bond yield curve.
- 

### Question #124 of 143

Question ID: 415566

A 20-year, \$1,000 face value, 10% semi-annual coupon bond is selling for \$875. The bond's yield to maturity is:

- A) 11.62%.
  - B) 11.43%.
  - C) 5.81%.
- 

### Question #125 of 143

Question ID: 415555

A 20-year bond with a par value of \$1,000 and an annual coupon rate of 6% currently trades at \$850. It has a yield to maturity of:

- A) 7.9%.
  - B) 6.8%.
  - C) 7.5%.
- 

### Question #126 of 143

Question ID: 415509

An investor buys a 20-year, 10% semi-annual bond for \$900. She wants to sell the bond in 6 years when she estimates yields will be 10%. What is the estimate of the future price?

- A) \$1,079.
  - B) \$946.
  - C) \$1,000.
- 

### Question #127 of 143

Question ID: 415570

Consider a 5-year, semiannual, 10% coupon bond with a maturity value of 1,000 selling for \$1,081.11. The first call date is 3 years from now and the call price is \$1,030. What is the yield-to-call?

- A) 7.28%.
  - B) 7.82%.
  - C) 3.91%.
- 

### Question #128 of 143

Question ID: 498313

What is the present value, stated as a percentage of par, of a three-year security that pays a fixed annual coupon of 6% using a discount rate of 7%?

- A) 100.00.
- B) 92.48.
- C) 97.38.

---

**Question #129 of 143**

Question ID: 415585

What is the annual-pay yield for a bond with a semiannual-bond basis yield of 5.6%?

- A) 5.52%.
  - B) 5.68%.
  - C) 5.60%.
- 

**Question #130 of 143**

Question ID: 415497

What value would an investor place on a 20-year, \$1,000 face value, 10% annual coupon bond, if the investor required a 9% rate of return?

- A) \$920.
  - B) \$1,091.
  - C) \$879.
- 

**Question #131 of 143**

Question ID: 415534

A three-year annual coupon bond has a par value of \$1,000 and a coupon rate of 5.5%. The spot rate for year 1 is 5.2%, the spot rate for year two is 5.5%, and the spot rate for year three is 5.7%. The value of the coupon bond is *closest to*:

- A) \$1,000.00.
  - B) \$937.66.
  - C) \$995.06.
- 

**Question #132 of 143**

Question ID: 460686

Ron Logan, CFA, is a bond manager. He purchased \$50 million in 6.0% coupon Southwest Manufacturing bonds at par three years ago. Today, the bonds are priced to yield 6.85%. The bonds mature in nine years. The Southwest bonds are trading at a:

- A) premium, and the yield to maturity has decreased since purchase.
  - B) discount, and the yield to maturity has increased since purchase.
  - C) discount, and the yield to maturity has decreased since purchase.
- 

**Question #133 of 143**

Question ID: 415495

What is the present value of a 7% semiannual-pay bond with a \$1,000 face value and 20 years to maturity if similar bonds are now yielding 8.25%?

A) \$879.52.

B) \$1,000.00.

C) \$878.56.

Question #134 of 143

Question ID: 415565

A 20-year, 9% semi-annual coupon bond selling for \$1,000 offers a yield to maturity of:

- A) 9%.
- B) 11%.
- C) 10%.

Question #135 of 143

Question ID: 442253

A \$1,000 par value, 10% annual coupon bond with 15 years to maturity is priced at \$951. The bond's yield to maturity is:

- A) equal to its current yield.
- B) greater than its current yield.
- C) less than its current yield.

Question #136 of 143

Question ID: 415561

Calculate the current yield and the yield-to-first call on a bond with the following characteristics:

- 5 years to maturity
- \$1,000 face value
- 8.75% semi-annual coupon
- Priced to yield 9.25%
- Callable at \$1,025 in two years

	<u>Current Yield</u>	<u>Yield-to-Call</u>
A)	8.93%	11.02%
B)	9.83%	19.80%
C)	8.93%	5.51%

Question #137 of 143

Question ID: 415560



A \$1,000 par value, 10%, semiannual, 20-year debenture bond is currently selling for \$1,100. What is this bond's current yield and will the current yield be higher or lower than the yield to maturity?

<u>Current Yield</u>	<u>Current Yield vs. YTM</u>
----------------------	------------------------------

- |                |        |
|----------------|--------|
| <b>A)</b> 8.9% | higher |
| <b>B)</b> 8.9% | lower  |
| <b>C)</b> 9.1% | higher |

---

### Question #138 of 143

Question ID: 415539

Using the following spot rates, what is the price of a three-year bond with annual coupon payments of 5%?

- One-year rate: 4.78%
- Two-year rate: 5.56%
- Three-year rate: 5.98%

- A)** \$97.47.  
**B)** \$93.27.  
**C)** \$98.87.

---

### Question #139 of 143

Question ID: 415536

A 2-year option-free bond (par value of \$10,000) has an annual coupon of 15%. An investor determines that the spot rate of year 1 is 16% and the year 2 spot rate is 17%. Using the arbitrage-free valuation approach, the bond price is *closest* to:

- A)** \$8,401.  
**B)** \$9,694.  
**C)** \$11,122.

---

### Question #140 of 143

Question ID: 415491

A coupon bond that pays interest semi-annually has a par value of \$1,000, matures in 5 years, and has a yield to maturity of 10%. What is the value of the bond today if the coupon rate is 8%?

- A)** \$1,144.31.  
**B)** \$922.78.  
**C)** \$1,221.17.
-

**Question #141 of 143**

Question ID: 460688

McClintock 8% coupon bonds maturing in 10 years are currently trading at 97.55. These bonds are option-free and pay coupons semiannually. The McClintock bonds have a:

- A) current yield less than 8.0%.
  - B) yield to maturity greater than 8.0%.
  - C) true yield greater than the street convention.
- 

**Question #142 of 143**

Question ID: 415516

An investor gathered the following information about two 7% annual-pay, option-free bonds:

- Bond R has 4 years to maturity and is priced to yield 6%
- Bond S has 7 years to maturity and is priced to yield 6%
- Both bonds have a par value of \$1,000.

Given a 50 basis point parallel upward shift in interest rates, what is the value of the two-bond portfolio?

- A) \$2,086.
  - B) \$2,030.
  - C) \$2,044.
- 

**Question #143 of 143**

Question ID: 460683

Consider a 10-year, 6% coupon, \$1,000 par value bond, paying annual coupons, with a 10% yield to maturity. The change in the bond price resulting from a 400 basis point increase in yield is *closest to*:

- A) \$480.
- B) \$1,160.
- C) \$170.