

Note: If the question in the video is labeled with a number, i.e. 1,2,3, please ignore. Questions are labeled in the playlist by number and are in the same order in this pdf.

1. What is the yield to maturity of a bond (YTM) with the following characteristics? Coupon rate is 6.80% with semiannual payments, current price is \$954 and there are 9 years to maturity.

- a. 3.76%
- b. 9.01%
- c. 7.51%
- d. 11.09%
- e. 2.89%

2. How much would you pay for a 6-year bond with a \$1,000 face value and a 6.80% coupon rate with semi-annual payments if the yield to maturity is 8.60%?

- a. \$916.99
- b. \$953.28
- c. \$723.72
- d. \$868.47
- e. \$1,087.48

3. Suppose Brampton municipality bonds pay a 3.90% coupon rate, paid semi-annually, with 14 years to maturity. What is the current yield on the bonds, assuming that the yield to maturity on the bonds is 5.60%?

- a. 1.95%
- b. 2.33%
- c. 4.66%
- d. 3.90%
- e. 5.60%

4. The following information of a callable bond which pays interest semi-annually is given: The coupon rate is 2.50% and the number of years to maturity is 14. The bond is callable at 130% of par value in 5 years. If the par value is \$1,000 and the current price is \$973, what is the yield to call?

- a. 3.15%
- b. 10.11%
- c. 8.15%
- d. 1.77%
- e. 2.18%

5. A zero-coupon bond has a yield to maturity of 6.57%, a face value of \$1,000, and its term to maturity is 14 years. What should you pay for the bond today? (Assume annual compounding)

- a. \$496.61
- b. \$410.31
- c. \$529.24
- d. \$465.99
- e. \$437.27

6. Given the following information about a bond: The bond pays interest semi-annually and sells at \$916 with a face value of \$1,000. The bond will mature in 12 years. If its yield to maturity is 4.60%, what is the bond's coupon rate?

- a. 9.06%
- b. 3.68%
- c. 7.36%
- d. 1.67%
- e. 1.84%

7. Today, you purchase a 7-year bond at \$980. The bond has a par value of \$1,000 and pays a 6.50% coupon with semi-annual payments. What would be the price of this bond in 4 years from now if market rates are expected to rise by 2.00% by then?

- a. \$1,104
- b. \$802
- c. \$939
- d. \$891
- e. \$1,045

8. Bond A: 5-year maturity, semiannual coupons, \$1,000 face value, sells at \$950, and has a yield to maturity of 8.40%. Bond B: 6-year maturity, semiannual coupons, \$1,000 par value, the yield to maturity is 10.50%, and has the same coupon rate as that of Bond A. What is the price of Bond B?

- a. \$1,050.20
- b. \$964.82
- c. \$853.82
- d. \$729.76
- e. \$813.16

9. An investor bought an 8-year bond at a 7% discount to its par value of \$1,000 three years ago. The bond has a 4.10% coupon rate payable semiannually. What was the effective annual rate of return to the investor if she sells the bond today for \$1,080? Assume coupons are not reinvested.

- a. 17.92%
- b. 8.96%
- c. 9.78%
- d. 4.48%
- e. 29.35%

10. The current price of a 25-year maturity bond is \$1,150. The face value is \$1,000, and the coupon rate is 9% per year, interest payable annually. What is the yield to maturity of the bond?

- A) 9.131%
- B) 7.638%
- C) 8.256%
- D) 7.669%
- E) 7.646%

11. Calculate the coupon rate of the bond given the following information: Face value \$10,000; current price \$9,171.96; yield to maturity=10.8%, term to maturity = 13 years. Assume the coupon interests are payable semi-annually.

- A) 4.8%
- B) 9.6%
- C) 9.8%
- D) 10.6%
- E) 10.8%

12. Three years ago, Jackson paid \$1,100 to buy a 7% coupon, 10 year Canada Government bond. He invested all the semi-annual coupon interest income to earn 6% APR compounded semi annually. If the yield to maturity of the bond today is 8.4%, what was his average annual rate of return (i.e. the EAR) on the bond in the last three years?

- A) 1.59%
- B) 1.62%
- C) 4.86%
- D) 6.86%
- E) 12.68%

13. Leslie Wallis wants to invest in a 5-year, zero-coupon, \$1,000 face value, Canada Government bond. He needs to earn a real rate of interest of 2% per year, and the expected rate of inflation is 1.5% per year. What is the maximum price he should pay for the bond? Assume annual compounding in your calculation.

- A) \$906.15
- B) \$908.25
- C) \$840.75
- D) \$841.97
- E) \$778.02

14. Suppose a 30-year maturity bond currently selling for \$1,124.09 is callable in 10 years at 115 percent of par value. It pays interest annually. If its yield to maturity is 7%, its yield to call is:

- A) 7.00%
- B) 6.39%
- C) 8.17%
- D) 7.28%
- E) Cannot tell based on the information provided

15. How much would you lose if you purchased a 20-year zero-coupon bond with a \$1,000 par value and 8.5% yield to maturity, only to see market interest rates increase to 10 percent one year later?

- A) \$17.74
- B) \$32.11
- C) \$43.66
- D) \$26.53
- E) \$39.77

16. Wedgeco Inc. has 10-year, semi-annual coupon bonds outstanding that have a 8% coupon rate and a market price of \$1,148.77 per bond. Wedgeco would like to issue \$5 million in new 10-year bonds. What coupon rate should be set on the new bonds if Wedgeco wants to sell them at par?

- A) 4.50%
- B) 5.00%
- C) 5.50%
- D) 6.00%
- E) 6.50%

17. You are arranging a \$270,000 Canadian mortgage with a 25-year amortization period and a 3.99 percent quoted interest rate. You agree to make monthly mortgage payments, starting one month from today. Suppose the bank offers you the opportunity to pay your monthly payments in four equal instalments (pay one-quarter of the monthly payment every week). How long will it take you to pay off your mortgage if you make weekly payments? Assume that there are fifty-two weeks in one year.

- A) 15.50 years
- B) 17.85 years
- C) 20.60 years
- D) 21.87 years
- E) 25.00 years

18. ABC Inc. has outstanding bonds that are selling for \$919.71. These have a 6% coupon rate and pay interest semi-annually and will mature in 12 years. If ABC were to issue new bonds today then what must be the coupon rate of the new bonds in order to sell the issue at par. The new bonds will mature in 12 years and pay semi-annual interest?

- A) 3.00%
- B) 3.50%
- C) 6.00%
- D) 7.00%
- E) 8.00%

19. You buy a ten-year 7 percent coupon bond for \$1,050, hold onto it for one year and then sell it for \$1,040. What is your rate of return over the 1-year holding period? Assume interest coupons were paid annually.

- A) 5.71 percent
- B) 6.00 percent
- C) 6.67 percent
- D) 7.00 percent
- E) 7.67 percent

20. Yesterday a 10-year bond with an 8 percent coupon rate had an 8 percent yield to maturity. Today that bond sells for \$1,107.83. What appears to have happened to market interest rates over the course of a day? Assume that coupons are paid annually.

- A) Market Rates have increased by 2.00 percent.
- B) Market Rates have decreased by 2.00 percent.
- C) Market Rates have increased by 0.72 percent.
- D) Market Rates have decreased by 1.50 percent.
- E) Market Rates have decreased by 8 percent.

21. What would be the premium (or discount) on a \$1,000 face value bond with a coupon rate of 10% and coupons paid every six months. The bond will mature in five years and the prevailing market rate of return on similar bonds is 12%.

- A) \$73.60 premium
- B) \$73.60 discount
- C) \$75.82 discount
- D) \$75.82 premium
- E) \$76.84 discount

22. A three-year 9% coupon bond (paying semi-annually) sells today at a \$50 discount to par. What would be its selling price two years from today if market rates remain unchanged over the next two years?

- A) \$964.95
- B) \$981.52
- C) \$1,000.00
- D) \$1,033.17
- E) \$1,123.37

23. What is the yield to maturity on a 10-year zero-coupon bond with a \$1,000 face value selling at \$742 (assume annual compounding)?

- A) 3.03%
- B) 7.42%
- C) 13.48%
- D) 34.78
- E) 42.37%

24. ABC Inc. has bonds that will mature in two years and have a 6% coupon rate paying semi-annual coupons. The bonds are priced at \$1,018.86. What is the annual real rate of return on this investment assuming the inflation rate is 2% and you hold the bond to maturity?

- A) 2.94 percent.
- B) 2.99 percent.
- C) 3.49 percent.
- D) 4.99 percent.
- E) 5.49 percent.

25. Accord Financial Group has bonds outstanding that have a 9 percent coupon rate and a market price of \$1,170.47 per bond. If the bonds mature in ten years and interest is paid semi-annually, what is the yield to maturity (YTM)?

- A) 3.32%
- B) 4.50%
- C) 6.00%
- D) 6.64%
- E) 9.00%

26. The bonds of Rose Hall Corporation are currently selling for \$914.11. These bonds mature in ten years, pay semi-annual interest and have a yield to maturity of 7.75%. What is the coupon rate?

- A) 5.50%
- B) 6.50%
- C) 7.20%
- D) 7.75%
- E) 8.50%

27. AMC Manufacturing Corporation has some 9% coupon bonds on the market that are selling at \$1,122.96; pay interest semi-annually; and mature in ten years. AMC would like to issue \$5 million in new ten-year bonds. What coupon rate should be set on the new bonds if AMC wants to sell them at par?

- A) 3.63%
- B) 4.50%
- C) 7.25%
- D) 8.25%
- E) 9.00%

28. A 7.50 percent 15-year bond, paying interest annually, can be called at 120 percent of par value in 10 years. The bond currently sells for \$1,145. The yield to call (YTC) is:

- A) 6.01%
- B) 6.75%
- C) 6.90%
- D) 7.38%
- E) 7.50%

29. Richvale Health Corporation has 8 percent, semi-annual coupon bonds with a current market price of \$926.58. The bonds have a par value of \$1,000 and a yield to maturity of 9.64 percent. How many years is it until the bonds mature?

- A) 5 years
- B) 6 years
- C) 8 years
- D) 10 years
- E) 12 years

30. A bond that pays coupons annually is issued with a coupon rate of 5 percent, maturity of 25 years, and a yield to maturity of 8 percent. What rate of return will be earned by an investor who purchases the bond and holds it for 1 year if the bond's yield to maturity at the end of the year is 9 percent?

- A) 2.65%
- B) -2.65%
- C) 5.00%
- D) 8.00%
- E) 9.00%

31. Kingston Metal Corporation wants to issue 15-year, \$1,000 face value zero-coupon bonds. If each bond is to yield 12 percent, what is the minimum number of bonds Kingston must sell if they wish to raise \$10 million from the sale? (Assume annual compounding).

- A) 10,000
- B) 20,000
- C) 40,000
- D) 54,735
- E) 57,435

32. Calculate the price of a 9.50% coupon bond maturing 15 years from now, yielding 6.82% to maturity. The face value is \$1,000 and interest is payable semi-annually.

- A) \$1,000.00
- B) \$1,246.90
- C) \$1,280.38
- D) \$1,178.16
- E) \$1,249.25

33. A consol bond was issued two years ago. The face value of the bond is \$1,000. Since then, interest rate has decreased to 10.50%, and the price of the consol bond has changed to \$1,033.33 today. What is the coupon rate of the perpetual bond? Assume interest is payable semi-annually.

- A) 10.50%
- B) 10.85%
- C) 9.73%
- D) 8.33%
- E) 11.13%

34. An 8.15 per cent 15 year bond can be called at 118% of face value in 8 years. The current price of the bond is \$998. If interest is payable semi-annually, what is the yield to call?

- A) 8.78%
- B) 6.96%
- C) 9.73%
- D) 4.86%
- E) 7.66%

35. A 10%, 12 year bond is currently selling at par (\$1,000). If the yield to maturity is 8% at the end of two years, what would be the current yield of the bond at that time? The bond pays interest semi-annually.

- A) 8.68%
- B) 7.98%
- C) 10.00%
- D) 8.80%
- E) 4.40%

36. Three years ago Dermot paid \$923.89 to buy a 5% ten year bond, and he sold the bond today for \$850. He reinvested all the coupons received during the three years at an APR of 8%. The bond pays interest semi-annually. The face value of the bond is \$1,000. What was the annual rate of return on his investment, in terms of EAR?

- A) 3.21%
- B) 3.69%
- C) 3.61%
- D) 3.12%
- E) 2.72%

37. A 5% coupon 10 year Canada Government bond has a yield to maturity of 4.56%. What would be the price of a similar bond issued by the TD Bank, if the current default premium on the bond is 0.8% over the Government bond? The face value is \$1,000 and the bond pays interest semi-annually. A) \$972.41

- B) \$988.13
- C) \$1,034.71
- D) \$1,035.02
- E) \$1,000

38. Jill plans to buy a provincial government bond today, hold it for one year, and sell it at the end of the year. The bond carries an 8% coupon, maturity is ten years, pays interest semi-annually, and face value is \$1,000. She can reinvest the interest at APR of 4%. If the yield to maturity is 4.5% today and if it will go up to 5% at the end of the year, what is Jill's rate of return?

- A) 1.38%
- B) 1.19%
- C) 1.31%
- D) 1.51%
- E) 1.08%

39. How much would you pay for a \$1,000 bond with a 7 percent coupon, semi-annual payments, eight years to maturity and a yield to maturity of 6 percent?
- A) \$844.76
 - B) \$939.53
 - C) \$1,000.00
 - D) \$1,062.81
 - E) \$1,280.79
40. Maria purchased a bond today for \$1,135. The bond matures in six years, pays semi-annual interest, and has a 7.5% coupon rate and a face value of \$1,000. What is Maria's yield to maturity?
- A) 2.44%
 - B) 3.75%
 - C) 4.88%
 - D) 6.50%
 - E) 7.50%
41. The zero-coupon bonds of Wilcox Bay have a market price of \$397.24 per bond, a face value of \$1,000 and a yield to maturity of 7.36 percent. How many years would it take for these bonds to mature? (Assume annual compounding).
- A) 7.6 years
 - B) 9.7 years
 - C) 11 years
 - D) 13 years
 - E) 15 years
42. MVP Corporation has some 8% coupon bonds on the market that are selling at \$813.20, pay interest semi-annually, have a face value of \$1,000 per bond and mature in fifteen years. MVP Corporation would like to issue \$50 million in new fifteen-year bonds. What coupon rate should be set on the new bonds if MVP Corporation wants to sell them at par?
- A) 4.00%
 - B) 8.00%
 - C) 5.25%
 - D) 10.50%
 - E) 15.00%
43. Rosedale Corporation bonds have a face value of \$1,000 with a yield to maturity of 13.25%, pay interest semi-annually, have three years remaining to maturity and are currently priced at \$1,066.31 per bond. What is the coupon rate on Rosedale bonds?
- A) 8.00%
 - B) 10.00%
 - C) 13.25%
 - D) 16.00%
 - E) 18.50%

44. Sara Lam buys an 8.4 percent coupon bond today that matures in ten years, pays semi-annual interest and has a yield to maturity of 4.6%. What is the annual rate of return on this bond if Sara sells it one year from today when its yield to maturity is 7.5 percent? Assume that the coupon interest is not reinvested.

- A) -18.72%
- B) -15.50%
- C) -12.27%
- D) 4.60%
- E) 7.50%

45. The Grand Mayan Company has some 8.6 percent, ten-year bonds, paying interest annually. These bonds can be called at 110 percent of face value in five years. The bonds have a face value of \$1,000 and currently sell for \$925 per bond. The yield to call (YTC) on the bonds is:

- A) 7.40%
- B) 8.60%
- C) 9.20%
- D) 11.00%
- E) 12.26%

46. By how much will an annual coupon bond increase in price over the next year if it currently sells for \$935.82, has ten years until maturity, face value of \$1,000 and an annual coupon rate of 8%? Assume market interest rates remain unchanged.

- A) \$12.50
- B) \$8.21
- C) \$7.47
- D) \$4.23
- E) \$3.16

47. Calculate the current price of a 7% semi-annual coupon bond, with a \$1,000 face value which matures in 5 years. Assume a required return of 6%.

- A) \$1,021.33
- B) \$1,042.65
- C) \$1,056.25
- D) \$1,068.01
- E) \$1,073.25

48. What is the coupon rate of a 15 year bond, which is currently selling for \$1,618.98? The bond's face value is \$1,000; yield to maturity is 9% and the coupon is paid semi-annually.

- A) 16.6%
- B) 9.3%
- C) 8.3%
- D) 15.1%
- E) 18.3%

49. What is the effective annual rate of return (EAR) for an investor who pays \$1,100.47 for a bond with a 6.5% coupon and sells the bond two years later for \$1,227.19? Assume that coupons are payable semi-annually and reinvested at APR of 6%.

- A) 23.9%
- B) 11.9%
- C) 14.7%
- D) 14.9%
- E) 11.3%

ADMS3530.com