MAN 307 EXAM

1. Suppose you had a relative deposit 10 TL at 5.5% interest 200 years ago. How much would the investment be worth today?
2. **447,189.84 TL**
3. 556,876.99 TL
4. 350,675 TL
5. 789,33 TL

=FV(5,5%;200;;-10)

= 447,189.84 TL

1. You want to begin saving for your daughter’s college education and you estimate that she will need 150,000 TL in 17 years. If you feel confident that you can earn 8% per year, how much do you need to invest today?
2. **40,540.34 TL**
3. 34,768 TL
4. 555,002.71 TL
5. 674,98 TL

=PV(8%;17;;150000) = 40,540.34 TL

1. You and your brother are planning a large anniversary party 3 years from today for your grandparents' 50th wedding anniversary. You have estimated that you will need 2,500 TL for this party. You can earn 3.5 percent compounded annually on your savings. How much would you and your brother have to deposit today in one lump sum to pay for the entire party?
2. 2,199.74 TL
3. **2,254.86 TL**
4. 2,308.16 TL
5. 2,334.90 T

= PV (3,5%;3;;2500)

= 2,254.86 TL

1. Suppose that a person deposits 15,000 TL today and 8,000 TL at the end of each year in a savings account for the next four years. And at the end of the fourth year in order to withdraw a total amount of 55,760 TL. What the interest rate the bank has to pay compounded annually?
2. 12%
3. 5%
4. **7%**
5. 3%

= RATE(4;-8000;-15000;55760) = 7%

1. The coupon rate of a bond equals:

A) its yield to maturity.   
 **B) a defined percentage of its face value.**  
 C) the yield to maturity when the bond sells at a discount.  
 D) the annual interest divided by the current market price.

1. As the coupon rate of a bond increases, the bond's:

A) face value increases.   
 B) current price decreases.  
 **C) interest payments increase.**  
 D) maturity date is extended.

1. A five-year bond with a 10 percent coupon rate and $1,000 face value is selling for $1,123. Calculate the yield to maturity on the bond assuming annual interest payments.

A) 10.0 percent   
 B) 8.9 percent  
 **C) 7.0 percent**  
 D) 5.0 percent

1. How much does the $1,000 to be received upon a bond's maturity in 4 years add to the bond's price if the appropriate discount rate is 6%?

A) $209.91   
 B) $260.00  
 C) $760.00  
 **D) $792.09**

1. How much should you pay for a $1,000 bond with 10% coupon, annual payments, and 5 years to maturity if the interest rate is 12%?

**A) $927.90**   
 B) $981.40  
 C) $1,000.00  
 D) $1,075.82

1. How much would an investor expect to pay for a $1,000 par value bond with a 9% annual coupon that matures in 5 years if the interest rate is 7%?

A) $696.74   
 B) $1,075.82  
 **C) $1,082.00**  
 D) $1,123.01

1. Mr. X invests $1,000 at a 10 percent nominal rate for one year. If the inflation rate is 4 percent, what is the real value of the investment at the end of one year?

A) $1,100   
 B) $1,000  
 **C) $1,058**  
 D) $1,040

1. Consider a 3-year bond with a par value of $1,000 and an 8% annual coupon. If interest rates change from 8 to 6% the bond's price will:

A) increase by $51.54.   
 B) decrease by $51.54.  
 **C) increase by $53.46.**  
 D) decrease by $53.46.

1. An investor buys a 10-year, 7% coupon bond for $1,050, holds it for 1 year, and then sells it for $1,040. What was the investor's rate of return?

**A) 5.71%**   
 B) 6.00%  
 C) 6.67%  
 D) 7.00%

1. You purchased a 6% annual coupon bond at face value and sold it one year later for $1,015.16. What was your rate of return on this investment if the face value at maturity was $1,000?

A) 4.48%   
 B) 6.15%  
 **C) 7.52%**  
 D) 6.07%

1. What is the rate of return for an investor who pays $1,054.47 for a 3-year bond with an annual coupon payment of 6.5% and sells the bond 1 year later for $1,037.19?

**A) 4.53%**   
 B) 5.33%  
 C) 5.16%  
 D) 4.92%

1. What is the amount of the annual coupon payment for a bond that has 6 years until maturity, sells for $1,050, and has a yield to maturity of 9.37%?

A) $98.64   
 B) $95.27  
 C) $101.38  
 **D) $104.97**

1. Two years ago bonds were issued at par with 10 years until maturity and a 7% annual coupon. If interest rates for that grade of bond are currently 8.25%, what will be the market price of these bonds?

A) $917.06   
 **B) $928.84**  
 C) $987.50  
 D) $1,000.00

1. An investor buys a 5-year, 9% coupon bond for $975, holds it for 1 year, and then sells the bond for $985. What was the investor's rate of return?

A) 9.00%   
 B) 9.23%  
 C) 9.65%  
 **D) 10.26%**

1. If a bond offers an investor 11% in nominal return during a year in which the rate of inflation is 4%, then the investor's real return is:

**A) 6.73%.**   
 B) 6.31%.  
 C) 15.44%.  
 D) 10.56%.

1. If you purchase a 5-year, zero-coupon bond for $691.72, how much could it be sold for 3 years later if interest rates have remained stable?

A) $848.12   
 B) $923.50  
 **C) $862.92**  
 D) $911.15

1. If a 4-year bond with a 7% coupon and a 10% yield to maturity is currently worth $904.90, how much will it be worth 1 year from now if interest rates are constant?

A) $904.90   
 **B) $925.39**  
 C) $947.93  
 D) $1,000.00

1. 16. What nominal return would an investor need to receive if he desires a real return of 4% and the rate of inflation is 5%?

A) 4.20%   
 B) 8.64%  
 C) 9.00%  
 **D) 9.20%**

1. 17.How much should you be prepared to pay for a 10-year bond with an annual coupon of 6% and a yield to maturity of 7.5%?

A) $411.84   
 **B) $897.04**  
 C) $985.00  
 D) $1,000.00

1. 18. How much would an investor lose the first year if she purchased a 30-year zero-coupon bond with a $1,000 par value and a 10% yield to maturity, only to see market interest rates increase to 12% one year later?

**A) $19.93**   
 B) $20.00  
 C) $23.93  
 D) $25.66

FV: 1000 N :30 R:10 % PV :57,31

FV:1000 N:29 R :12 % PV : 37,38

DIFFERENCE :19,93

1. An annuity is defined as a set of:
2. **equal cash flows occurring at equal intervals of time for a specified period.**
3. equal cash flows occurring at equal intervals of time forever.
4. unequal cash flows occurring at equal intervals of time forever.
5. unequal cash flows occurring at equal intervals of time for a specified period.