Time Value of Money Exercises

1) Tracey plans to buy a brand new Ford Pinto when he graduates college in 6 years. He plans to put $1,200 in a savings account on January 1 of each year. The savings account will pay 11% percent interest annually. How much money will Cody have in his savings account when he graduates?
   a) $17,966 **b) $9,495** c) $9,738 d) $9,259

2) Yoon borrowed $15,000 from the bank on January 1, 2009. He must repay this amount plus the accrued interest of 12% on January 1, 2014. How much will Yoon have to pay on January 1, 2014?
   a) $26,435 b) $26,938 c) $16,101 d) $18,509

3) Stephanie plans to have $20,000 in her bank account at the end of 4 years. How much should she invest today if her bank pays 6% interest?
   a) $25,250 b) $15,806 c) $16,319 **d) $15,842**

4) Jeremy won the lottery that entitles him to receive $500 per month for the next 20 years. If money is worth 6% compounded monthly, what are his lottery winnings worth today?
   a. **$69,790** b. $120,000 c. $31,020 d. $9,494

5) Jones Company issued 8% 10 year $3,000,000 par value bonds that pay interest semiannually. The current market rate is 10%. How much will Jones Company be able to sell the bond for?
   $2,626,134

Chapter 10:

Example 1 Solution:

Interest-Bearing Notes

On January 1, 2009, Smith & Co. purchase a new piece of machinery. It costs $35,000. The company put $5,000 down in cash and borrowed the rest with a $30,000 note payable that has an annual interest rate of 7% and monthly payments of $718.39 over the next 48 months.

1. Prepare the journal entry to purchase the delivery vehicle on January 1, 2009

Dr. Machinery	**35,000**	
Cr. Note Payable		**30,000**
Cr. Cash		**5,000**

2. Complete the amortization table for vehicle for the first six months:
(Please round all amounts to the nearest penny- 2 decimal points)

Date	Cash Payment	Interest Expense	Reduction of note (principal)	Note payable balance
1/1/09	**------**	**-----**	**-----**	**$30,000**
1/31/09	**718.39**	**175**	**543.39**	**29,456.61**
2/28/09	**718.39**	**171.83**	**546.56**	**28,910.05**
3/31/09	**718.39**	**168.65**	**549.74**	**28,360.31**
4/30/09	**718.39**	**165.44**	**552.95**	**27,807.36**
5/31/09	**718.39**	**162.21**	**556.18**	**27,251.18**
6/30/09	**718.39**	**158.97**	**559.42**	**26,691.76**

Record the journal entry for the January 31st payment

Dr. Note Payable	**543.39**	
Dr. Interest Expense	**175**	
Cr. Cash		**718.39**

Chapter 10 Exercises

1) Which is not a current liability? a) wages payable b) unearned revenue **c) Preferred stock** d) accounts payable

2) Which one of these statements is TRUE concerning contingent liabilities?
   a) Contingent liabilities are both probable and reasonable estimable
   b) Lawsuits are an example of a contingent liability
   c) Contingent liabilities are disclosed in the footnotes
   d) All of the above

3) What term is used for bonds that have specific assets pledged as collateral?
   a) Callable bonds b) convertible bonds **c) secured bonds**
   d) discount bonds

4) Foster Company borrows $75,500 on August 31, 2009 from Arizona State Bank by signing a $75,500, 11%, one-year note. What is the accrued interest at December 31, 2009?
a) $2,655 **b) $2,768** c) 10,620 d) 3,540

5) On January 1, 2009, Ham Corp. issues $300,000, 5 year, 7% bonds at face value. The entry to record the issuance of the bonds would include a:
   a) debit to cash for $21,000
   b) Debit to bonds payable for $300,000
   c) Credit to bonds payable for $300,000
   d) Credit to bond interest expense of $21,000

6) Redwood Company has an $800,000 note outstanding on Dec. 31 2010 that reaches maturity on Dec. 31 2012. During 2011 Redwood will have to make payments on the principal totaling $350,000 and the remaining amount will be paid during 2012. How should Redwood classify its note on the 2010 balance sheet?
   a) Current Liability of $800,000
   b) Long-term Liability of $800,000
   c) Current Liability of $350,000
   d) Current Liability of $350,000 and Long-term Liability of $450,000

7) Which of the following statements about interest are true?
   a) Interest is payment for the use of someone else's money
   b) The interest payment on a bond is the same amount each year
   c) Interest rates are presented as annual rates unless otherwise stated
   d) Both A and C are correct
   e) A, B, and C are correct

8) Briese Corporation issued 100 bonds with a coupon rate of 10%. If the market rate is 7% when these bonds are issued at what price will the bonds be issued?
   a) Face Value + Bond Premium
   b) Face Value – Bond Discount
   c) Face Value

9) The $1,000 face value ABC bond has a coupon rate of 6%, with interest paid semi-annually, and matures in 5 years. If the bond is priced to yield 8%, what is the bond's value today?
   a. $600.75
   b. $897.41
   c. $918.89
   d. $1,000
      i. FV = $1,000
      ii. CF = $60/2 = $30
      iii. N = 5 x 2 = 10
      iv. i = 8%/2 = 4%
      v. **PV = $918.89**

Chapter 11 Exercises

1) Which one of these statements does **not** identify a benefit of the corporate organization?
   a) The corporation's life does not depend on the existence of a particular shareholder
   b) With continuous shareholder turnover, the management functions of a corporation are vested in the board of directors which appoints company officers
   c) Transferable ownership rights
   d) The shareholders are responsible for the debts of a corporation

Andy Inc. forms on Jan. 1, 2009. To finance its operations, it issued 1000 shares of $3 par common stock. The stock initially sold for $5 per share. On July 1 2009, Andy Inc. bought 100 shares of its stock, to hold in its treasury for $7 per share. Then, on Sept. 1, 2009, the company announced it would conduct a 3 for 1 stock split on Jan. 1, 2010. On March 1, 2010, the board of directors of Andy Inc. authorizes a cash dividend of $2 per share for shareholders as of March 15, 2010 (record date). Dividend checks are mailed to stockholders on April 1, 2010.

2) Show the journal entry Andy Inc. made on Jan 1. 2009 assuming all 1000 shares of stock were sold:

Dr. Cash	**5000**	
Cr. Common Stock		**3000**
Cr. Pd. In Capital		**2000**

3) Show the journal entry Andy Inc. made on July 1, 2009 for the purchase of Treasury stock:

Dr. Treasury Stock	**700**	
Cr. Cash		**700**

4) How many shares are outstanding on Jan. 2, 2010?
   a) 1000 **b) 2700** c) 3000 d) 900

5) Show the journal entry Andy Inc. makes on the declaration date, record date, and payment date for cash dividends.

3/1/09 Dr. Dividends	**5400**	
Cr. Dividends Payable		**5400**
4/1/09 Dr. Dividends Payable	**5400**	
Cr. Cash		**5400**

6) Dividends declared & paid:
   a) Decreases assets & decreases equity b) decreases liabilities & decreases equity
   c) Increases equity & increases liabilities d) increases liabilities & decreases equity

7) Which of the following statements is true concerning stock splits?
   a) A stock split increases retained earnings and therefore increases total stockholder's equity.
   b) A stock split increases paid-in capital since additional shares are issued.
   c) A stock split results in a reduction in the par value per share and increases the number of shares outstanding.
   d) All of the above are true.

Chapter 12 Exercises

1) Which would not be in the operating activities of the statement of Cash Flows?

a) Payment to suppliers
b) cash receipts from customers
c) Payment for monthly rent
d) purchase new machinery

2) Which one of these statements is FALSE concerning the statement of Cash Flows?

a) It only uses the accrual basis of accounting to prepare the statement of cash flows
b) It reflects the cash disbursements throughout the year
c) It organizes the cash inflows and outflows into three categories: operating, investing & financing
d) A company can use either the direct or indirect method to show the statement of Cash Flows

3) Reporting significant noncash activities satisfies the

a) Matching principle **b) full disclosure principle** c) cost principle d) revenue recognition

4) Identify whether the following transactions will be in the **operating, investing or financing** section of the Statement of Cash Flows and put a (+) if it's a cash inflow or a (-) if it's a cash outflow:

a. Payment to suppliers: **Operating Activity –**
b. Payment of Dividends: **Financing Activity –**
c. Issuance of a bond: **Financing Activity +**
d. Issuance of Stock: : **Financing Activity +**
e. Sale of inventory for cash: **Operating Activity +**
f. Receipt of Dividends: **Operating Activity+**
g. Interest Paid: **Operating Activity –**
h. Payment to employees for services: **Operating Activity –**
i. Sale of office building: **Investing Activity +**
j. Purchase of new machinery: : **Investing Activity --**
k. Make loans to another entity: **Investing Activity –**
l. Interest Received: **Operating Activity +**
m. Reacquire Treasury Stock: **Financing Acitivity –**
n. Purchase investments: **Investing Activity –**

5) During the period, Jordan, Inc. recorded $750,000 in sales. Of that, 80% of the sales were paid in cash; the remaining sales were on credit. The balance of Accounts Receivable was $40,000 at the beginning of the period and $80,000 at the end of the period. What was the amount of total cash from customers for the period in the statement of cash flows?

a) $710,000 b) $700,000 c) $ 600,000 d) $40,000

6) If the company had Accounts payable at the beginning of the year of $50,000 and a balance at the end of the year of $48,000 and purchases on account of $350,000, what were the cash payments to vendors for the year?

a) $350,000 b) $400,000 c) $ 398,000 **d) $352,000**