1. Suppose your employer offers you a choice between a $3,900 bonus and 400 shares of the company stock. Whichever one you choose will be awarded today. The stock is currently trading for $67 per share. Ignore transaction costs.

   a. Suppose that if you receive the stock bonus, you are free to trade it. Which form of the bonus should you choose? What is its value?

   b. Suppose that if you receive the stock bonus, you are required to hold it for at least one year. What can you say about the value of the stock bonus now? What will your decision depend on?

Click the icon to see the Worked Solution (Formula Solution).

a. Suppose that if you receive the stock bonus, you are free to trade it. Which form of the bonus should you choose? What is its value?

The value of the stock bonus is $\$ \underline{\hspace{2cm}}$. (Round to the nearest dollar.)

Which form of the bonus should you choose? (Select the best choice below.)

- [ ] A. Stock bonus
- [ ] B. Cash bonus

b. Suppose that if you receive the stock bonus, you are required to hold it for at least one year. What can you say about the value of the stock bonus now? What will your decision depend on? (Select the best choice below.)

- [ ] A. The stock bonus cannot be worth more than the value calculated in part (a), so you prefer the cash bonus.
- [ ] B. You cannot make a definitive decision but the stock bonus is not likely worth as much as the value calculated in part (a).
- [ ] C. The answer is the same as part (a).
- [ ] D. The stock bonus is worth more than its value calculated in part (a), so you still prefer the stock bonus.

What will your decision depend on? (Select the best choice below.)

- [ ] A. Your decision should be based on how well your company's stock has done over the past year.
- [ ] B. Your decision should be based on the type of bonus your employer prefers.
- [ ] C. You should consider the stock's potential value in one year along with the risk involved.
- [ ] D. Your decision should be based on the market value of the stock today.
2. What is the present value of $14,000 received
   a. 14 years from today when the interest rate is 10% per year?
   b. 28 years from today when the interest rate is 20% per year?
   c. 7 years from today when the interest rate is 5% per year?

   
   Click the icon to see the Worked Solution (Formula Solution).

   Click the icon to see the Worked Solution (Financial Calculator and Spreadsheet Solution).

   a. What is the present value of $14,000 received 14 years from today when the interest rate is 10% per year?
   The present value is $ ___________ . (Round to the nearest dollar.)

   b. What is the present value of $14,000 received 28 years from today when the interest rate is 20% per year?
   The present value is $ ___________ . (Round to the nearest dollar.)

   c. What is the present value of $14,000 received 7 years from today when the interest rate is 5% per year?
   The present value is $ ___________ . (Round to the nearest dollar.)

3. Your brother has offered to give you either $20,000 today or $40,000 in 13 years. If the interest rate is 6% per year, which option is preferable?

   
   Click the icon to see the Worked Solution (Formula Solution).

   Click the icon to see the Worked Solution (Financial Calculator and Spreadsheet Solution).

   What is the present value of the future amount (amount received in 13 years)?
   The present value is $ ___________ . (Round to the nearest dollar.)

   Which option is preferable? (Select the best choice below.)

   ○ A. Take the present amount offered because it is less than the future amount.
   ○ B. Take the future amount because the larger amount is always worth more no matter when you receive it.
   ○ C. Take the present amount offered because it is greater than the present value of the future amount.
   ○ D. Take the future amount because its present value is greater than the present amount offered.

4. Your bank account pays interest with an EAR of 5%. What is the APR quote for this account based on semiannual compounding? What is the APR with monthly compounding?

   
   Click the icon to see the Worked Solution (Formula Solution).

   With semiannual payments, the APR is ___________ %. (Round to three decimal places.)

   With monthly payments, the APR is ___________ %. (Round to three decimal places.)