

Use the information, below, to answer questions 1 and 2.

Selected items from the financial statements of ABC Company for the year 20X1:

| | |
|----------------------------------|-------|
| Retained earnings, 01/01/X1 | ?? |
| Total assets at 12/31/X1 | \$950 |
| Net Income, year ended 12/31/ X1 | 110 |
| Retained earnings 12/31/X1 | ?? |
| Total Liabilities at 12/31/X1 | 400 |
| Common stock at 12/31/X1 | 120 |
| Other Paid-in capital 12/31/X1 | 70 |

No dividend were declared or paid during the year.

1. What was the balance in retained earnings at 1/1/x1?
 - a. \$210
 - b. \$110
 - c. \$400
 - d. \$190
 - e. None of the above.

2. What was the balance in retained earnings at 12/31/X1?
 - a. \$110
 - b. \$400
 - c. \$190
 - d. \$210
 - e. None of the above

3. An annuity pays \$6,000 at the beginning of each year for 20 years. If present value of the annuity is \$45,000. Which of the following answers is closest to the discount rate?
 - a. 12%
 - b. 13%
 - c. 14%
 - d. 15%
 - e. None of the above rates corresponds with a present value of annuity within \$500 of \$45,000. (Provide the correct answer)

4. An annuity pays \$8,000 at the end of each year for 15 years. The discount rate is 12%. Which of the following is the closest to present value of this annuity?
 - a. \$54,500
 - b. \$51,750
 - c. \$120,000
 - d. \$57,500
 - e. None of the above answers are within \$500 of the correct answer.

5. Which of the following would be the best investment (i.e. the highest present value)? Assume an annual discount rate of 16%

- a. An investment that pays \$1,200 at the end of each year for 4 years, assuming annual compounding
 - b. An investment that pays \$290 at the end of each quarter for 4 years, assuming quarterly compounding
 - c. An investment that pays \$290 at the beginning of each quarter 4 years, assuming quarterly compounding?
 - d. \$2,000 today.
6. Which of the following would be the best investment (i.e. the highest present value)? Assume an annual discount rate of 4%
- a. An investment that pays \$1,200 at the end of each year for 4 years, assuming annual compounding
 - b. An investment that pays \$290 at the end of each quarter for 4 years, assuming quarterly compounding
 - c. An investment that pays \$290 at the beginning of each quarter 4 years, assuming quarterly compounding?
 - d. \$2,000 today.

Use the following data on ACME stock to solve problems 7 and 8.

| <u>Probability</u> | <u>Return</u> |
|--------------------|---------------|
| 0.15 | -0.25 |
| 0.20 | 0.05 |
| 0.30 | 0.12 |
| 0.20 | 0.15 |
| 0.15 | 0.55 |

7. What is the expected rate of return on the investment? (Round to the nearest %)
 - a. 11%
 - b. 12%
 - c. 21%
 - d. 22%
 - e. None of the above (Provide the answer)
8. What is the standard deviation of the returns? (Round to the nearest percent)
 - a. 11 %
 - b. 12 %
 - c. 21 %
 - d. 22%
 - e. None of the above. (Provide the answer)