NAME:_____

P.I. A.N.5: Solve algebraic problems arising from situations that involve fractions, decimals and percents (decrease/increase and discount), and proportionality/direct variation

1. Find the percent of change, rounded to the nearest whole percent. Describe the change as an increase or decrease.
   $6.25/h to $6.75/h

   [A] 8% increase   [B] 9% decrease

   [C] 8% decrease   [D] 9% increase

2. Find the percent of change, rounded to the nearest whole percent. Describe the change as an increase or decrease.
   $7.45/h to $6.95/h

3. In a certain week, the London stock market went down from 1835 to 1573. What was the percent of decrease to the nearest whole percent?

4. The circulation of a newsletter decreased from 6500 to 3575. What was the percentage decrease in circulation?

   [A] 181%   [B] 4.5%

   [C] 55%   [D] 45%

5. The sales of HiTop sneakers rose from $5 million to $5.4 million. Find the percent increase to the nearest whole percent.

   [A] 0.7%   [B] 8%

   [C] 7%   [D] 0.8%

6. Use a calculator to find the percent of change of a price that goes from $19.99 to $16.99. Describe the percent of change as a percent of increase or decrease. Round to the nearest percent.

7. Chris bought a guitar for $77.00 and sold it for $126.28. What percent profit did Chris make on the guitar?

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8. Vicki paid $11.25 for a pair of slacks that usually sells for $25. What percent discount did she receive?

   [A] 13.75%   [B] 36.25%   [C] 55%   [D] 45%

9. Use any problem solving strategy to solve the following problem. Michael reduced the price of an item by 15%. What percent does Michael need to increase the reduced price by to get back to the original price? Round to the nearest percent.

10. Compare the quantities in Column A and Column B.

    Column A   Column B
    the percent of change for $325   the percent of change for $250
    discounted to $300   discounted to $225

    [A] The quantity in Column A is greater.   [B] The quantity in Column B is greater.

    [C] The quantities are equal.

    [D] The relationship cannot be determined from the information given.

[1] A

[2] 7% decrease

[3] 14%

[4] D

[5] B

[6] 15%; decrease

[7] 64%

[8] C

[9] about 18%

[10] B