

NAME: _____

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

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

the percent of change for \$325
discounted to \$300

Column B

the percent of change for \$250
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