NAME                                          DATE                    PERIOD

# Unit 4, Lesson 8: Percent Increase and Decrease with Equations

1. A pair of designer sneakers was purchased for $120. Since they were purchased, their price has increased by 15%. What is the new price?

2. Elena's aunt bought her a $150 savings bond when she was born. When Elena is 20 years old, the bond will have earned 105% in interest. How much will the bond be worth when Elena is 20 years old?

3. In a video game, Clare scored 50% more points than Tyler. If $c$ is the number of points that Clare scored and $t$ is the number of points that Tyler scored, which equations are correct? Select **all** that apply.

   A. $c = 1.5t$
   B. $c = t + 0.5$
   C. $c = t + 0.5t$
   D. $c = t + 50$
   E. $c = (1 + 0.5)t$

4. Draw a diagram to represent each situation:

   a. The number of miles driven this month was a 30% decrease of the number of miles driven last month.

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    b. The amount of paper that the copy shop used this month was a 25% increase of the amount of paper they used last month.

    (from Unit 4, Lesson 6)

5. Which decimal is the best estimate of the fraction $\frac{29}{40}$?

    A. 0.5
    B. 0.6
    C. 0.7
    D. 0.8

    (from Unit 4, Lesson 5)

6. Could 7.2 inches and 28 inches be the diameter and circumference of the same circle? Explain why or why not.

    (from Unit 3, Lesson 3)