## 6<sup>th</sup> Grade Math Common Assessment: Chapter 10

| Name: | Date |
|-------|------|
|       |      |

6.EE.8

**1.)** Savannah's daily commute from home to work is more than 35 miles each way.

a. Write an inequality that represents this situation.

b. Graph the solutions of the inequality from part a.

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**2.)** All of the students in a class are older than 10 years. What inequality represents the ages x of the students?

A. x < 10</li>
B. x ≤ 10
C. x > 10
D. x ≥ 10

## 6.EE.9

**3.)** The table below shows the balance of a savings account after t weeks, where money is being withdrawn at a constant rate. Peter can find the balance of the account based on how many weeks have passed. What are the independent and dependent variables, and how do they change?

| Time<br>(weeks), <i>t</i> | Balance<br>(dollars), <i>b</i> |
|---------------------------|--------------------------------|
| 0                         | 850                            |
| 1                         | 800                            |
| 2                         | 750                            |
| 3                         | 700                            |

- **A.** As the independent variable t increases by 1, the dependent variable b increases by 50.
- **B.** As the independent variable t increases by 1, the dependent variable b decreases by 50.
- **C.** As the independent variable b increases by 1, the dependent variable t increases by 50.
- **D.** As the independent variable b increases by 1, the dependent variable t decreases by 50.

## 6.EE.9

**4.)** Gloria is an artist. She sets a goal to paint 2 pieces every month. She has already painted 5 pieces. The number of pieces Gloria paints depends on the number of months she spends painting. Which statements describe the number of pieces p Gloria paints over t months if she meets her goal? Select all correct answers.

- A. p is the independent variable and t is the dependent variable.
- **B.** t is the independent variable and p is the dependent variable.
- C. p increases by 2 as t increases by 1.
- D. t increases by 2 as p increases by 1.
- **E.** The equation representing the situation is p = 2t + 5.

## 6.EE.9 and 6.RP.3

**5.)** The table below shows the number of words w a person types after t minutes. The number of words typed per minute is a constant 52.

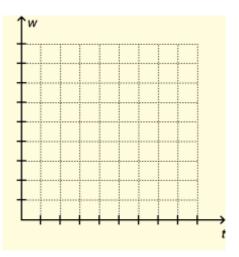
| Time<br>(minutes), t | Number of<br>words, w |
|----------------------|-----------------------|
| 0                    | 0                     |
| 1                    | 52                    |
| 2                    | 104                   |
| 3                    | 156                   |

a. The number of words typed is determined by how many minutes the person spends typing. What are the independent and dependent variables?

Independent Variable:\_\_\_\_

Dependent Variable: \_\_\_\_

b. Graph the values from the table.



c. Write an algebraic expression that represents the situation.