Name: _____

1.3.D1 – REPRESENTATIONS OF FUNCTIONS

Past due on: _____ Period: _____

SPIRAL REVIEW

First, use the distributive property and/or collect like terms on the left side of the equation. Then use inverse operations to solve the equation. Show all work.

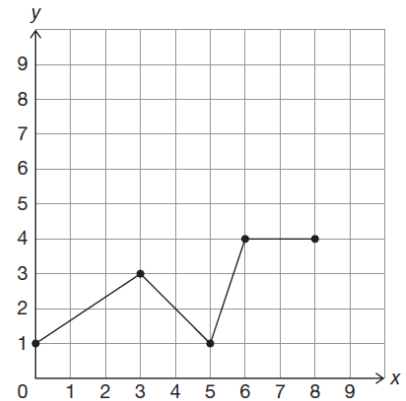1. $2(-3n - 2) - 5n = -114$

2. $-6 - 8(4n - 8) = 186$

Problems 3 – 6: If necessary, refer to both Lesson 1.1 examples in the chapter summary.

Two graphs are shown.

Graph 1

- One graph describes Molly's height (in inches) over a period of years.
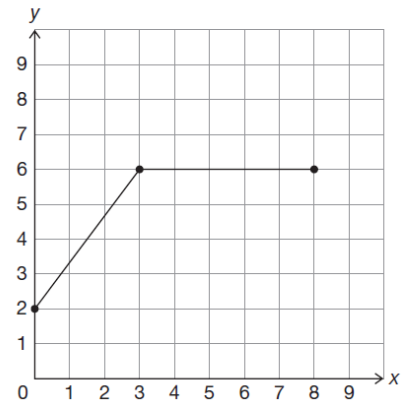- One graph describes Molly's weight (in pounds) over a period of years.

3. Match each graph with the appropriate scenario and explain your reasoning.

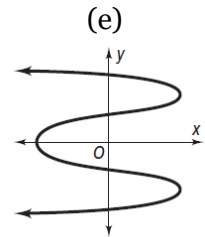4. Identify the independent & dependent quantities in Graph 1.
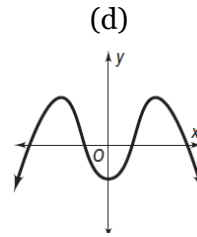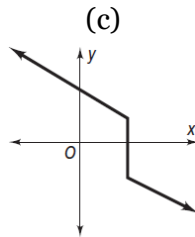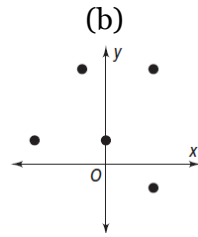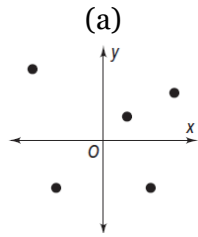
Graph 2

5. Identify the independent & dependent quantities in Graph 2.

6. Label each axis with the appropriate quantity and unit.

7. Hector knows there is a relationship between the number of cars he washes and the time it takes him to wash those cars. Identify the independent quantity and the dependent quantity in the problem situation.

8. Angela knows there is a relationship between the area of the squares she draws and the side length of each square. Identify the independent quantity and the dependent quantity in the problem situation.

9. Use the Vertical Line Test to determine whether the relation is a function.

(a)   (b)   (c)   (d)   (e)

10. The function $T(n) = 4.3n$ predicts the time T (in seconds) it takes n people in a row to say the tongue twister *A cricket critic cricked his neck at a critical cricket match.*

    a. Identify the independent variable and the quantity it represents.

    b. Identify the dependent variable and the quantity it represents.

    c. Find $T(5)$. Explain what it represents.

    d. What does $T(0) = 0$ mean?