

Name _____

Date _____

1. Write and solve each of the following linear equations.

a. Ofelia has a certain amount of money. If she spends \$12, then she has $\frac{1}{5}$ of the original amount left. How much money did Ofelia have originally?

b. Three consecutive integers have a sum of 234. What are the three integers?

c. Gil is reading a book that has 276 pages. He has already read some of it last week. He plans to read 20 pages tomorrow. By then, he will be $\frac{2}{3}$ of the way through the book. How many pages did Gil read last week?

2. a. Without solving, identify which of the following equations has a unique solution, no solution, or infinitely many solutions.

$$3x + 5 = -2$$

$$6(x - 11) = 15 - 4x$$

$$12x + 9 = 8x + 1 + 4x$$

$$2(x - 3) = 10x - 6 - 8x$$

$$5x + 6 = 5x - 4$$

- b. Solve the following equation for a number x . Verify that your solution is correct.

$$-15 = 8x + 1$$

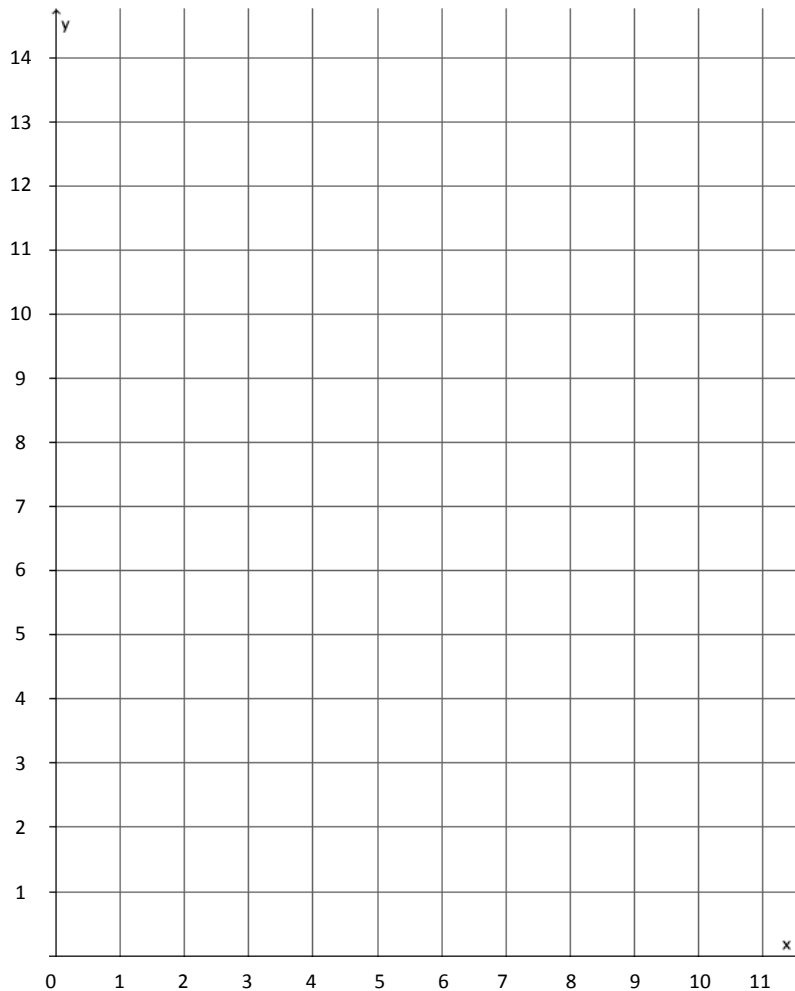
- c. Solve the following equation for a number x . Verify that your solution is correct.

$$7(2x + 5) = 4x - 9 - x$$

3. a. Parker paid \$4.50 for three pounds of gummy candy. Assuming each pound of gummy candy costs the same amount, complete the table of values representing the cost of gummy candy in pounds.

Gummy Candy in pounds (x)	1	2	3	4	5	6	7	8	9
Cost (y)			\$4.50						

- b. Graph the data on the coordinate plane.



- c. On the same day, Parker's friend Peggy was charged \$5 for $1\frac{1}{2}$ lb. of gummy candy. Explain in terms of the graph why this must be a mistake.