NAME DATE PERIOD

Unit 5, Lesson 3

Practice Problems

1. Here is an equation that represents a function: 72x + 12y = 60.

Select all the different equations that describe the same function:

A.
$$120y + 720x = 600$$

B.
$$y = 5 - 6x$$

C.
$$2y + 12x = 10$$

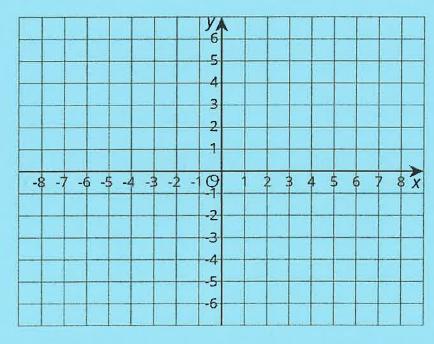
D.
$$y = 5 + 6x$$

E.
$$x = \frac{5}{6} - \frac{y}{6}$$

F.
$$7x + 2y = 6$$

G.
$$x = \frac{5}{6} + \frac{y}{6}$$

- 2. a. Graph a system of linear equations with no solutions.
 - b. Write an equation for each line you graph.



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- 3. Brown rice costs \$2 per pound, and beans cost \$1.60 per pound. Lin has \$10 to spend on these items to make a large meal of beans and rice for a potluck dinner. Let *b* be the number of pounds of beans Lin buys and *r* be the number of pounds of rice she buys when she spends all her money on this meal.
 - a. Write an equation relating the two variables.
 - b. Rearrange the equation so b is the independent variable.
 - c. Rearrange the equation so r is the independent variable.
- 4. Solve each equation and check your answer.

a.
$$2x + 4(3 - 2x) = \frac{3(2x+2)}{6} + 4$$

b.
$$4z + 5 = -3z - 8$$

c.
$$\frac{1}{2} - \frac{1}{8}q = \frac{q-1}{4}$$