

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. $y = 5 + 6x$

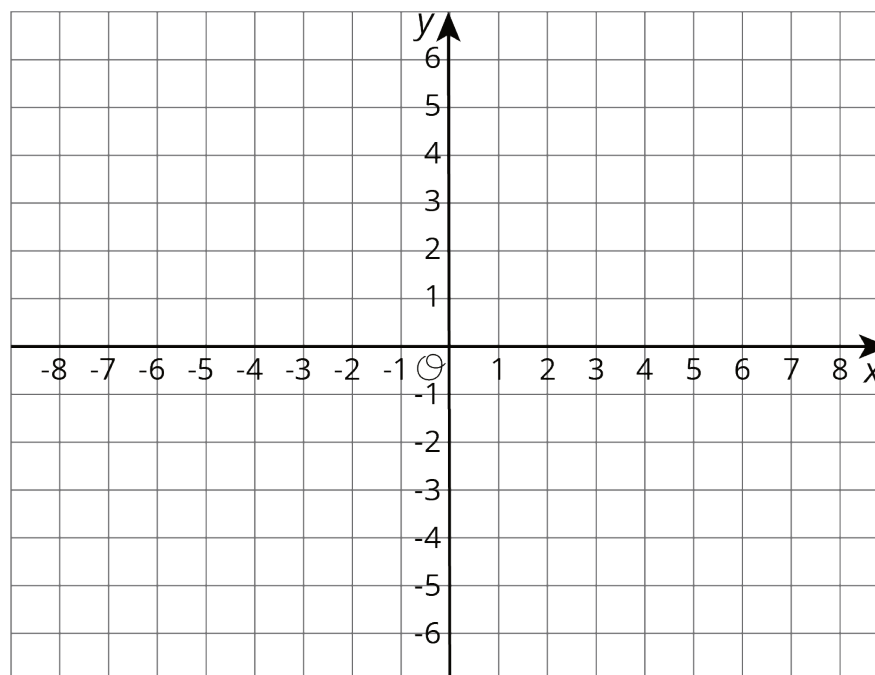
E. $x = \frac{5}{6} - \frac{y}{6}$

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.



(From Unit 4, Lesson 13.)

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.

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

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

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

(From Unit 4, Lesson 6.)