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. $y = 5 + 6x$

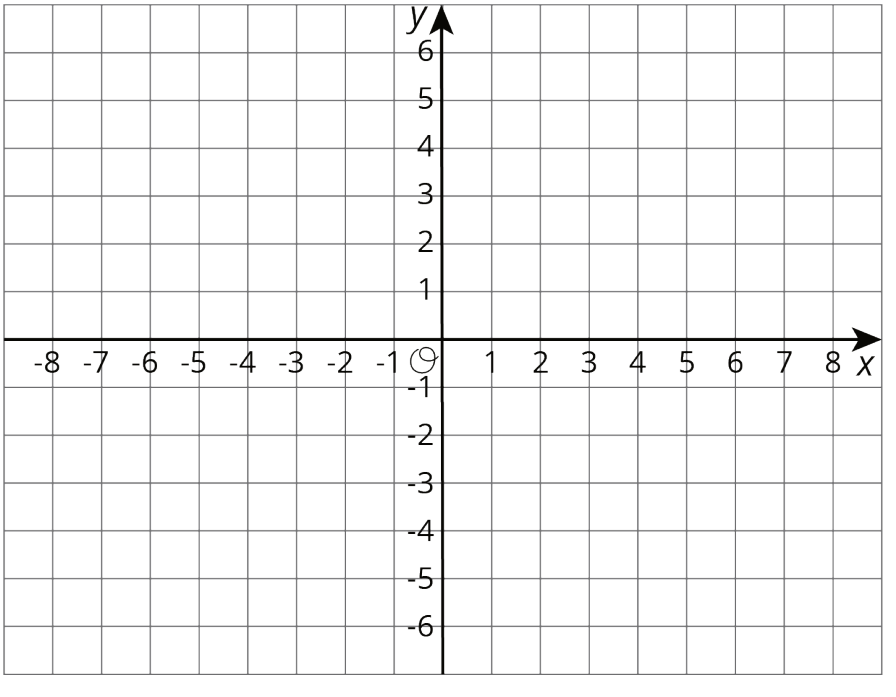
   E. $x = \frac{5}{6} - \frac{y}{6}$

   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 5, Lesson 14.)

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 14.)