## Unit 5, Lesson 3

## Practice Problems

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

Select all the different equations that describe the same function:
A. $120 y+720 x=600$
B. $y=5-6 x$
C. $2 y+12 x=10$
D. $y=5+6 x$
E. $x=\frac{5}{6}-\frac{y}{6}$
F. $7 x+2 y=6$
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.

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. $2 x+4(3-2 x)=\frac{3(2 x+2)}{6}+4$
b. $4 z+5=-3 z-8$
c. $\frac{1}{2}-\frac{1}{8} q=\frac{q-1}{4}$

