1.1

Date:

Objective:

Steps for solving a linear equation
1. distribute
2. multiply by the LCD to get rid of fractions
3. add like terms
4. move variables together on the same side of the equation
5. move constants together on the same side of the equation
6. divide coefficient

Solve for the variable. Leave answers as a simplified fraction. Show work.

1. $3x - 2 = 4$

2. $\frac{x}{2} + 8 = 36$

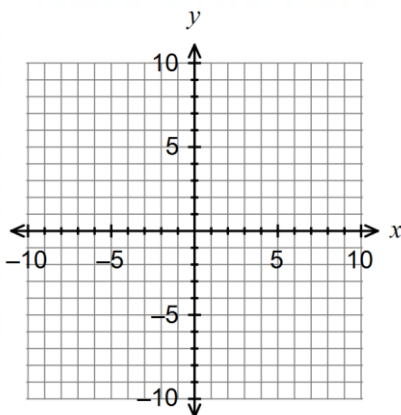3. $\frac{7x}{3} + \frac{8}{3} = 2$

4. $3(2x - 1) + 5 = 2x + 12$
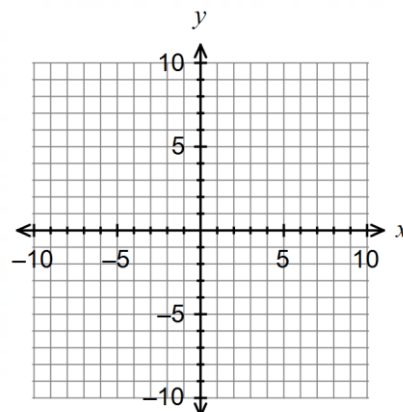
5. $2(5x - 1) = 3x - 14 + x$

6. $12x + 7 - 2x = 5x$
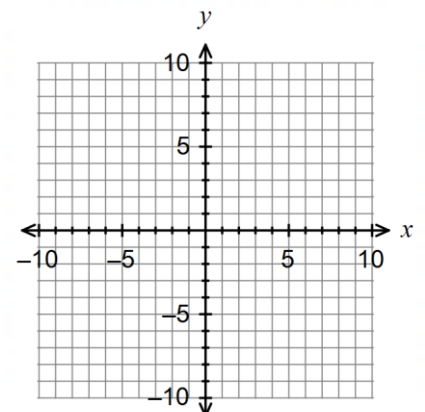
Graph the following.

7. $y = x + 3$

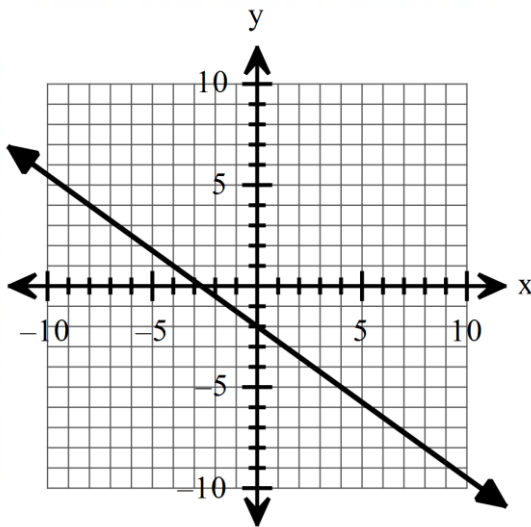8. $y + 1 = -\frac{1}{4}(x + 3)$

9. $2x + 3y = 9$

Read the following situations. Then answer the question. Define your variable. Show your work.

10. A tuxedo rental service charges a $150 flat fee for a suit plus $50 per additional day. The total cost y of renting a tuxedo for x number is $y = 150 + 50x$. How many days have a person rented a tuxedo if the final cost is $250?

Write an equation for the following graph.

11.

12.