Name _____ Date _____ Period ___

Linear Functions Review

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

1. $x - 5 = 17$

2. $4x + 2 = 10$

3. $3(x + 11) = 45$

4. $\frac{x}{7} + 9 = 10$

5. $\frac{5x}{4} + \frac{7}{4} = 8$

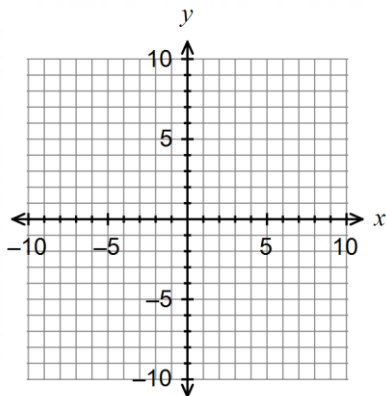6. $5(3x - 2) + 1 = x - 11$

7. $-3(2x - 1) = x - 14 + 7x$

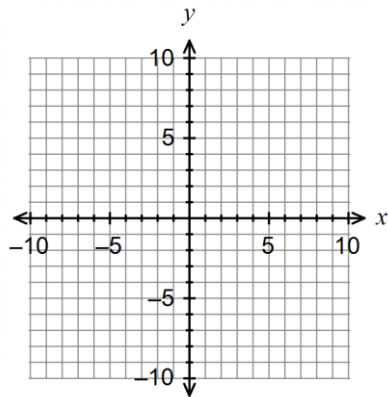8. $8x - 3x + 5 = 10$

9. $17x + 7 - 8x = -26x$

10. $7y + x = 7y + 8$
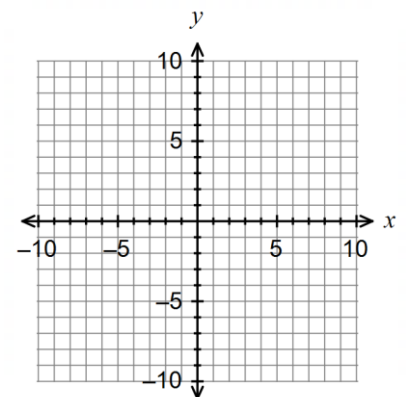
Graph the following.

11. $y = -x - 7$

12. $x - 3y = 6$
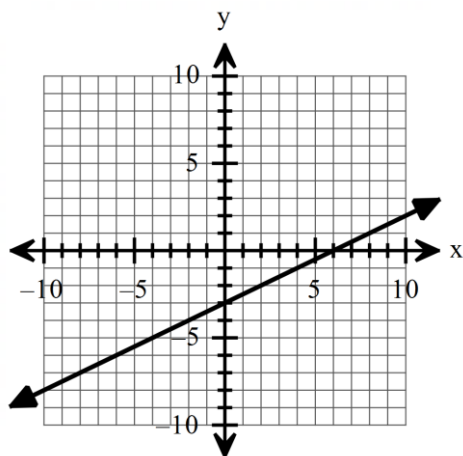
13. $y - 2 = 2(x + 4)$

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

14. To train for a full marathon, Jordan has to go for a run every morning for a month. His distance can be modeled by the function, $m = 3h + 5$, where m is the total distance he ran in miles and h is the number of hours he has ran. At the end of the month, Jordan ran a total of 149 miles. How many hours of running did Jordan train for his full marathon?
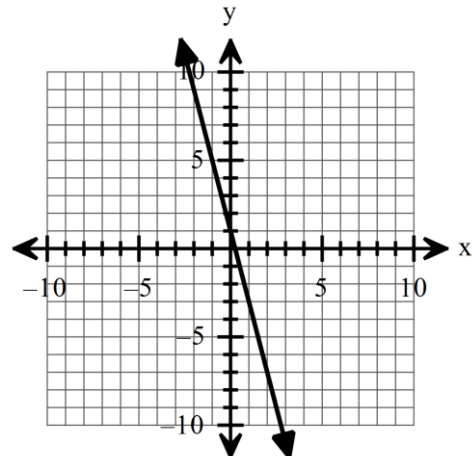
Given the following graphs, write the equation in slope-intercept form.

15.

Equation:_____

16.

Equation:_____