READY, SET, GO!

Name

Period

**Date** 

## **READY**

Topic: Using substitution to find a missing value.

Substitute the given value of x into the equation to find the value of y.

1. 
$$5x - 9y = 73$$
;  $x = 2$  2.  $-4x + 9y = 16$ ;  $x = 5$  3.  $3x - 8y = 1$ ;  $x = -5$ 

$$2. -4x + 9y = 16$$
:  $x = 5$ 

3. 
$$3x - 8y = 1$$
:  $x = -5$ 

4. 
$$-14x + 5y = 51$$
;  $x = 1$  5.  $9x - 7y = 21$ ;  $x = 0$ 

5. 
$$9x - 7y = 21$$
;  $x = 0$ 

6. 
$$12x - 15y = -42$$
;  $x = \frac{1}{4}$ 

Use the given value to find the value of the other variable that is not provided.

7. 
$$5a + 2b = -37$$

8. 
$$13f - 7g = 10$$

9. 
$$2m + 3z = -22$$

$$b = -1$$

$$f = -3$$

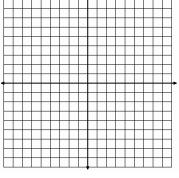
$$z = -9$$

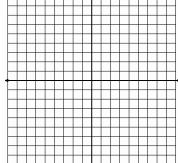
SET

Topic: Examining the impact of the direction of the inequality symbol

- 10. Graph  $y > \frac{3}{4}x 2$  and  $y < \frac{3}{4}x + 3$  on the grid at the right.
- 11. What is the relationship between the two lines in your graph?
- 12. Name 3 points that satisfy both inequalities.
- 13. Now, graph  $y < \frac{3}{4}x 2$  and  $y > \frac{3}{4}x + 3$ on the nextl grid at the right.
- 14. Can you name 3 points that satisfy both inequalities for this system?
- 15. Compare the graph for problem 10 with the graph for problem 13. How are they the same?

How are they different?



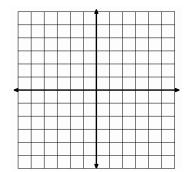


GO

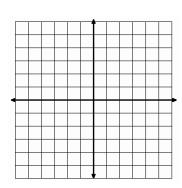
Topic: Graphing linear inequalities

## Graph each inequality.

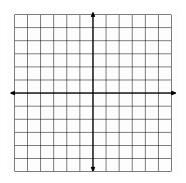
16. 
$$y \le 3x - 4$$



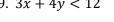
$$y \le -2x + 3$$







19. 
$$3x + 4y < 12$$





$$6x + 8y \le 24$$



$$5x + 3y \le 15$$

