

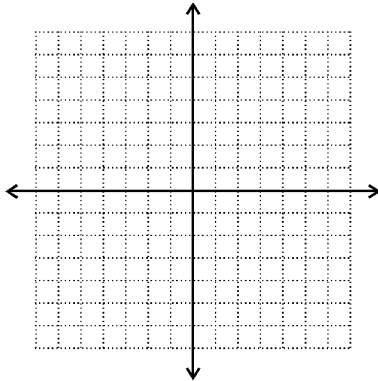
### Equations, Inequalities and Graphing

Graph each group of three equations on the given graph. Label each line with its equation.

1.  $y = 5$

2.  $y = \frac{2}{7}x - 2$

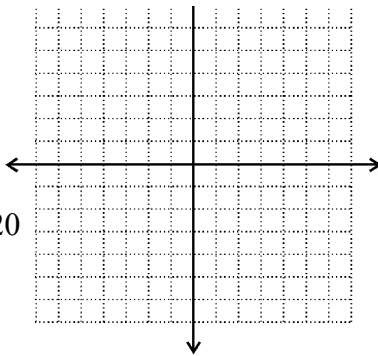
3.  $y = -3x + 1$



4.  $y = \frac{3}{4}x - 2$

5.  $3x + 5y = 15$

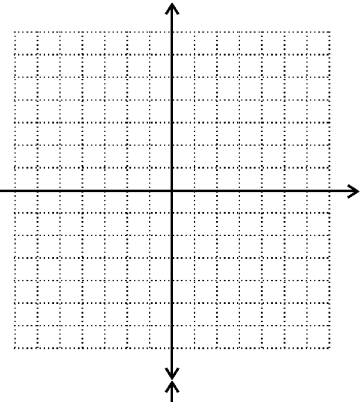
6.  $-5x + 4y \geq 20$



7.  $x = 4$

8.  $y = -2x + 5$

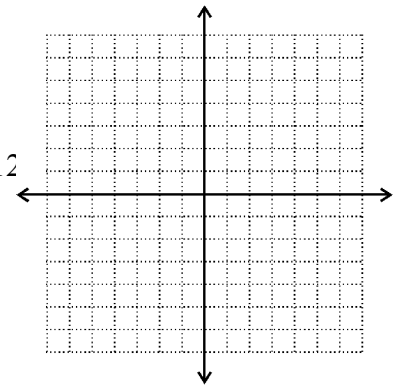
9.  $y = x - 3$



10.  $y = 2x$

11.  $4x + 3y < 12$

12.  $y < -3$



Find the equation of the line meeting the following criteria:

13. goes through  $(-4, 3)$ , slope: 4

14. Through  $(3, -2)$ , slope -8

15. through  $(6, 8)$  slope  $1/3$ .

16. Through  $(-2, -5)$  slope  $1/4$ .

17. through  $(3, 5)$  and  $(8, 10)$

18. Through  $(-4, 7)$  and  $(2, 19)$

Write the following in slope intercept ( $y = mx + b$ ) and in standard form ( $Ax + By = C$ ).

19.  $4y = 3x + 20$

20.  $3y + 2x = 6$

21.  $-3x + 2y + 12 = 0$

22.  $4y + 5x - 7 = 0$