Topic 2 Review

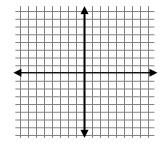
Find the slope of the line containing the given points.

7. Is the point
$$(2, 3)$$
 on the line $y = 4x - 5$? (Show your work.)

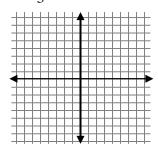
8. Is the point
$$(-1, 6)$$
 on the line $y = 3x - 3$? (Show your work.)

Graph each line.

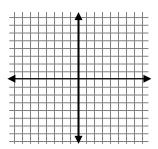
9.
$$y = \frac{-1}{2}x + 2$$



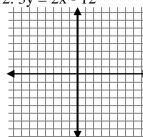
10.
$$y = \frac{2}{3}x - 1$$



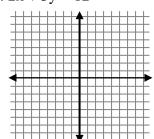
11.
$$y = x - 5$$



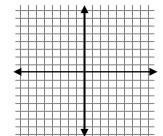
12.
$$3y = 2x - 12$$



13.
$$2x + 3y = 12$$



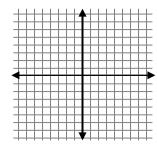
14.
$$2x - 7y = 21$$

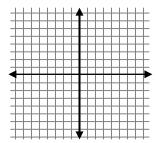


An equation for a line is given. Find the x- and y- intercepts. Graph.

15.
$$x - 4y = 8$$

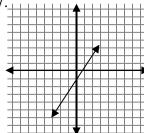
16.
$$2x + 3y = 12$$



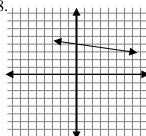


Give the equation of each line.

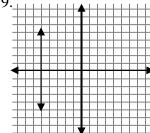
17._



18.



19



20. Write the equation for the line containing the point (2, -5) that has slope of 3.

21. Write the equation for the line containing the point (6, -1) that has slope of $\frac{-1}{2}$.

22. Are the two lines 3x - y = -7 and x + 3y = 6 parallel?

23. Find the equation of the line that passes through the point (-2, -7) that has a slope of 3.

- 24. Find the equation of the line that passes through the point (1, 0) that has a slope of $\frac{-2}{3}$
- 25. Find the equation of the line that passes through the point (6, 2) that has a slope of $\frac{2}{3}$
- 26. Find the equation of the line that passes through the points (2, 6) and (-4, 6)
- 27. Find the equation of the line that passes through the points (2, 7) and (-4, -5).
- 28. Find the equation of the line that passes through the points (-4, -5) and (6, 0).

Cumulative Review:

Solve each for x.

29.
$$2(3x + 4) - 3 = (-13)$$
 30. $3x - 4 = -6x + 14$ 31. $ax + 4 = 10$

$$30 \quad 3y = 4 = -6y + 14$$

31.
$$ax + 4 = 10$$

32.
$$\frac{3}{x+1} = \frac{7}{12}$$
 33. $\frac{2}{5}x+3=7$ 34. $4x+5=-12$

33.
$$\frac{2}{5}x + 3 = 7$$

34.
$$4x + 5 = -12$$

Simplify each.

35.
$$3(2x - 5) - 2(5x - 4)$$

35.
$$3(2x-5)-2(5x-4)$$
 36. $2+2(3-2^2\cdot 5)+18$ 37. $(-4)(-5)(-3)$

38.
$$2x^2 + 4x - 5x^2 - 7 + 4x - 19$$
 39. $3x - 4y + 2y + 7y + 16x$

39.
$$3x - 4y + 2y + 7y + 16x$$