Name _____

Date:_____ Pd: ____

Find the domain and range. Then determine if it is a function.

1. $\{(6, 3), (2, 1), (-2, 3)\}$ 2. $\{(-5, 2), (2, 4), (1, 1), (-5, -2)\}$ 3. $x + y = 2$

Find each value if $f(x) = 5x - 9$ and $g(x) = 2x + 35$.

4. $f(6)$ 5. $g(-30)$ 6. $f(g(4))$

State whether each is linear.

7. $3x^2 - y = 6$ 8. $2x + y = 11$ 9. $4 + xy = y$

Write each equation in standard form, then find the value of A, B, and C.

10. $y = 7x + 15$ 11. $\dfrac{2}{3}x - \dfrac{3}{4}y = 6$

Find the x and y intercepts.

12. $\dfrac{-1}{5}y = x + 4$ 13. $6x + 12y = 48$

Find the slope.

14. $(-6, -3), (6, 7)$ 15. $(4, -3), (4, 5)$

Write an equation in slope intercept form given the following.

16. slope is $\dfrac{3}{4}$, y-intercept is 10   17. $(3, -8), (6, 1)$ 18. $m = -2, (-3, 5)$

19. passes through $(3, 2)$ parallel to the graph $y = 2x - 5$

20. passes through $(-5, 1)$ perpendicular to the graph $x + 2y = 4$

Graph. Make a sketch.

21. pass through $(0, 1)$ with a slope of 2

22. passes through $(3, -2)$ perpendicular to a slope of $\dfrac{-2}{3}$

23. passes through $(-2, 2)$ parallel to the graph of $-2x + y = 4$

24. $f(x) = [[.2x]] - 1$ 25. $f(x) = 3x - 2 + 4$

26. $f(x) = \begin{cases} x + 2 & \text{if } x \geq 1 \\ 3 & \text{if } x < 1 \end{cases}$ 27. $y > 2x - 5$

28. $3x - 2y \geq 8$ 29. $f(x) = -5$

30. $x + 2y = 4$

Find the slope.

31. $x = 3$ 32. $x - 2y = 5$

33. Write an equation in slope intercept form given the x-intercept $= 3$ and the y-intercept $= -2$