

Function Review

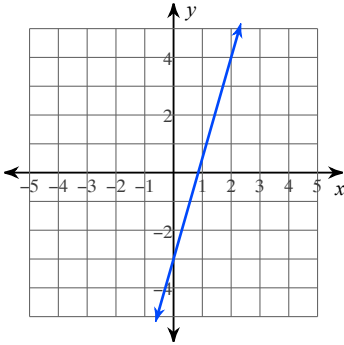
Evaluate each function using the provided equation.

1) $p(x) = -2x^3 + 5x$; Find $p(2)$

2) $g(x) = x^2 + 5x$; Find $g(-4)$

Evaluate the function $f(x)$ below at $f(0)$ and $f(2)$.

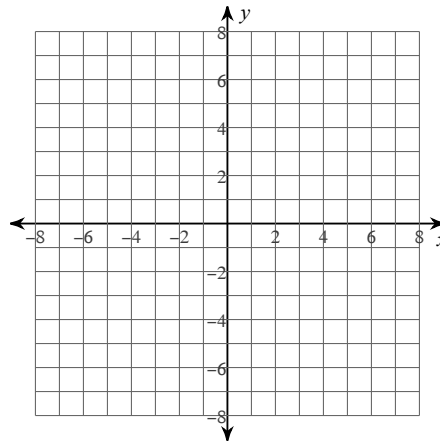
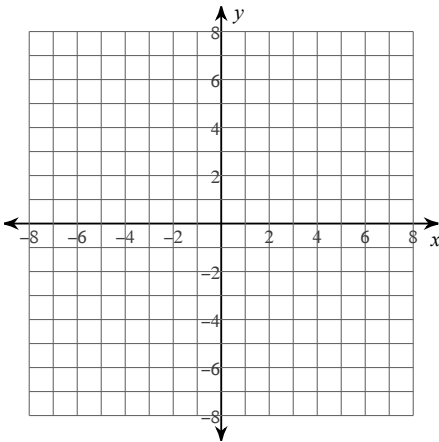
3)



Sketch the graph of each function. Give the x & y-intercepts, if possible. Then find the domain and range of each.

4) $y = 3\sqrt[3]{x + 2} - 1$

5) $y = 2 + \sqrt{x - 1}$



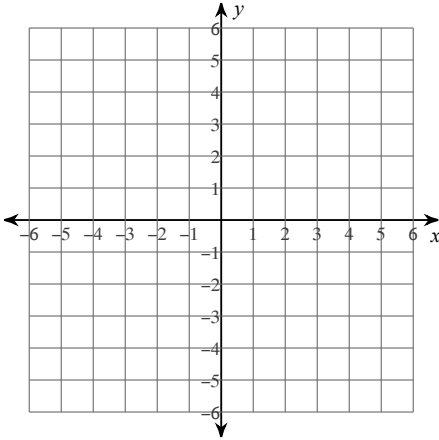
Find the slope between the given points.

6) through: $(-5, -1)$ and $(-2, 4)$

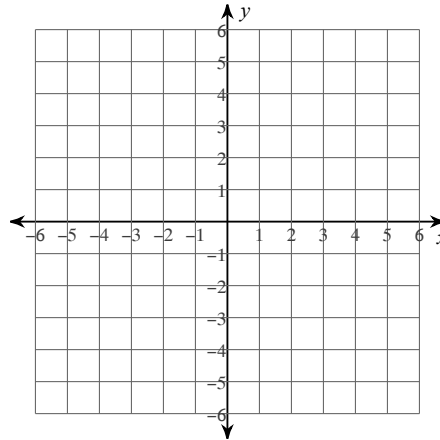
7) through: $(2, -4)$ and $(5, -4)$

Sketch the graph of each line.

8) $2x - y = 2$



9) $y = \frac{2}{5}x + 3$



Write the slope-intercept form of the equation of the line described.

10) through: $(1, 5)$, slope = 7

11) through: $(3, 3)$ and $(-1, -3)$

12) through: $(4, 5)$, parallel to $y = 8x - 4$

13) through: $(1, -5)$, perp. to $y = \frac{1}{2}x - 3$

Solve each equation by factoring or by using square roots.

14) $2a^2 - 12a = 0$

15) $6n^2 = 54$

16) $x^2 - 5x + 4 = 0$

17) $a^2 - 9a + 14 = 0$

Solve each equation by using your graphing calculator solver or by graphing. Give answers to two decimal places if necessary.

18) $8p^2 + 9p - 5 = 0$

19) $2n^3 - 4n^2 - 6n = -2x - 4$