

HW51: Review

Find the slope of the line through each pair of points.

1) $(-3, 12), (5, 11)$

2) $(-7, -19), (13, -19)$

3) $(-18, -11), (-3, -2)$

4) $(-6, -16), (10, 5)$

Write the slope-intercept form of the equation of each line given the slope and y-intercept.

5) Slope = -1 , y-intercept = 2

6) Slope = -2 , y-intercept = 4

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

7) $y + 4 = -\frac{1}{3}(x + 3)$

8) $y - 2 = -\frac{3}{2}(x + 2)$

Write the slope-intercept form of the equation of the line through the given point with the given slope.

9) through: $(-4, 0)$, slope = 1

10) through: $(-2, -2)$, slope = $\frac{1}{2}$

Evaluate the functions.

11) $f(x) = -2 \cdot 2^x$; Find $f(-2)$

12) $g(x) = |-x - 3| + 2$; Find $g(-10)$

13) $g(a) = -3|-a + 3|$; Find $g(4)$

14) $p(n) = -3n^2 + n + 3$; Find $p(-7)$

15) $Bob(x) = 3 \cdot 3^{-x} + 1$; Find $Bob(1)$

16) $h(n) = n - 1$; Find $h(-1)$

17) $k(x) = n^2 + 5n$; Find $k(3)$

18) $A(t) = 4t - 1$; Find $A(-1 + t)$

19) $w(n) = 3|n + 3|$; Find $w(-2n)$

20) $w(n) = 3|x + 3|$; Find $w(4)$

Simplify. Your answer should contain only positive exponents.

21) $2b^3 \cdot 6b^0$

22) $3x^3 \cdot 5x^2$

23) $4b^{-1} \cdot 3b^3$

24) $2p \cdot 3p^0$