

WS 4.3B Parallel and Perpendicular Lines

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

1) through: $(-3, -3)$, parallel to $y = \frac{7}{3}x + 1$

2) through: $(-1, -2)$, parallel to $y = 3x - 3$

3) through: $(-5, -5)$, parallel to $y = \frac{8}{5}x + 1$

4) through: $(-5, -1)$, parallel to $y = \frac{1}{5}x - 5$

5) through: $(3, 2)$, parallel to $y = 2x + 5$

6) through: $(5, 3)$, perp. to $y = -\frac{5}{4}x - 3$

7) through: $(-3, -4)$, perp. to $y = -\frac{3}{7}x + 4$

8) through: $(-1, -3)$, perp. to $y = -\frac{1}{2}x + 4$

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

10) through: $(-3, 0)$, perp. to $y = -x + 4$

11) If $f(-4) = 2$, write an equation in slope intercept for $f(x)$ so that it is parallel to the function $g(x) = \frac{1}{2}x - 5$

12) If $f(6) = -1$, write an equation in slope intercept for $f(x)$ so that it is parallel to the function $g(x) = 3x$

13) If $f(-3) = 5$, write an equation in slope intercept for $f(x)$ so that it is parallel to the function $g(x) = 2x - 4$

14) If $f(1) = -3$, write an equation in slope intercept for $f(x)$ so that it is perpendicular to the function $g(x) = \frac{1}{3}x$

15) If $f(6) = 2$, write an equation in slope intercept for $f(x)$ so that it is perpendicular to the function $g(x) = -2x + 4$

16) If $f(-5) = 7$, write an equation in slope intercept for $f(x)$ so that it is perpendicular to the function $g(x) = -\frac{1}{5}x - 10$