Algebra 0507 Name_____

# Extra Practice - Writing y = mx + b

Date_____ Period____



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

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

2) through: $(5, -1)$, slope = $\frac{1}{2}$

3) through: $(-5, 4)$, slope = undefined

4) through: $(4, -4)$, slope = $-\frac{1}{2}$

5) through: $(5, 2)$, slope = $\frac{4}{9}$

6) through: $(5, -5)$, slope = $-\frac{1}{5}$

7) through: $(4, 1)$, slope = $\frac{3}{2}$

8) through: $(4, 1)$, slope = 0

9) through: $(4, 1)$, slope = $\frac{1}{2}$

10) through: $(1, -3)$, slope = 2

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

11) through: $(4, 0)$, parallel to $y = -x + 3$

12) through: $(-2, 4)$, parallel to $y = -\frac{9}{2}x + 3$

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

14) through: $(-5, -1)$, parallel to $y = -\frac{3}{5}x + 2$

15) through: $(4, 3)$, parallel to $y = \frac{3}{2}x - 1$

16) through: $(3, -5)$, parallel to $y = \frac{7}{2}x - 3$

17) through: $(2, 1)$, parallel to $y = -x + 4$

18) through: $(2, -4)$, parallel to $y = -\frac{9}{2}x + 3$

19) through: $(2, -5)$, parallel to $y = -\frac{1}{2}x + 2$

20) through: $(-4, 4)$, parallel to $y = -\frac{1}{4}x - 2$

# Answers to Extra Practice - Writing y = mx + b

1) $y = -4$

2) $y = \frac{1}{2}x - \frac{7}{2}$

3) $x = -5$

4) $y = -\frac{1}{2}x - 2$

5) $y = \frac{4}{9}x - \frac{2}{9}$

6) $y = -\frac{1}{5}x - 4$

7) $y = \frac{3}{2}x - 5$

8) $y = 1$

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

10) $y = 2x - 5$

11) $y = -x + 4$

12) $y = -\frac{9}{2}x - 5$

13) $y = \frac{1}{5}x + 4$

14) $y = -\frac{3}{5}x - 4$

15) $y = \frac{3}{2}x - 3$

16) $y = \frac{7}{2}x - \frac{31}{2}$

17) $y = -x + 3$

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

19) $y = -\frac{1}{2}x - 4$

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