Name Key Date Period

Lesson X HW – Writing Equations in Slope Intercept Form
Math 7-5

Solve each equation for y.

1.) $y - 7x = 9$

$+7x \quad +7x$

$y = 7x + 9$

m = 7 b = 9

2.) $\frac{5x}{10} + \frac{10}{10} = \frac{10y}{10}$

$\frac{1}{2}x + 1 = y$

m = $\frac{1}{2}$ b = 1

3.) $2x + 3y = 3$

$-2x \quad -2x$

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

$y = -\frac{2}{3}x + 1$

m = $-2/3$ b = 1

4.) $\frac{3y}{3} = \frac{15x}{3} - \frac{12}{3}$

$y = 5x - 4$

m = 5 b = -4

5.) $8x - 4y = -4$

$-8x \quad -8x$

$\frac{-4y}{-4} = \frac{-8x}{-4} - \frac{4}{-4}$

$y = 2x + 1$

m = 2 b = 1

6.) $9x + 3y = 3$

$-9x \quad -9x$

$\frac{3y}{3} = \frac{-9x}{3} + \frac{3}{3}$

$y = -3x + 1$

m = -3 b = 1

7.) $3y - 21 = 12x$

$+21 \quad +21$

$\frac{3y}{3} = \frac{12x}{3} + \frac{21}{3}$

$y = 4x + 7$

m = 4 b = 7

8.) $-2x - y = -3$

$-2x + 3 = y$

m = -2 b = 3

9.) $x - 2y = 4$

$+2y \quad +2y$

$x = 4 + 2y$

$-4 \quad -4$

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

m = 1/2 b = -2

10.) $x + 5y - 10 = 2x$

$-x \qquad -x$

$5y - 10 = x$

$\frac{5y}{5} = \frac{x}{5} + \frac{10}{5}$

$y = \frac{1}{5}x + 2$

m = 1/5 b = 2

11.) $6(-2x + y) = 12$

$-12x + 6y = 12$

$\frac{-12x}{6} \quad \frac{-12}{6} = \frac{6y}{6}$

$-2x - 2 = y$

m = -2 b = -2

12.) $-2(x + 3y) = 18$

$-2x - 6y = 18$

$+2x \qquad +2x$

$\frac{-6y}{-6} = \frac{2x}{-6} + \frac{18}{-6}$

$y = -\frac{1}{3}x - 3$

m = -1/3 b = -3

13.) $5(x + y) = 20 + 3x$

$5x + 5y = 20 + 3x$

$-3x \qquad -3x$

$2x + 5y = 20$

$-2x \qquad -2x$

$\frac{5y}{5} = \frac{-2x}{5} + \frac{20}{5}$

m = 5 b = 5

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

$m = -2/5 \quad b = 4$

14.) $5y + 8 = 2y - 3x + 5$

$-2y \quad -2y$

$3y + 8 = -3x + 5$

$-5 \qquad -5$

$3y + 3 = -3x$

$-3 \qquad -3$

$\frac{3y}{3} = \frac{-3x}{3} - \frac{3}{3}$

m = -1 b = -1

$y = -1x - 1$