

Algebra I

WS 8-5

2)	$y = -4x + 2$	16)	$y = -\frac{4}{3}x + \frac{4}{3}$	30)	$y = 3x + 3$
4)	$y = \frac{1}{3}x + 6$	18)	$y = -x + 4$	32)	$y = 6x - 13$
6)	$y = -\frac{1}{4}x + 4$	20)	$y = \frac{3}{8}$	34)	$y = 4x - 4$
8)	$y = 3x - 7$	22)	$y = x + 3$	36)	$y = -2$
10)	$y = -\frac{2}{5}x - 1$	24)	$y = 2x - 2$	38)	$x = -1$
12)	$y = 3x + 5$	26)	$y = -\frac{4}{5}x - 2$		
14)	$y = -2x - 5$	28)	$y = \frac{3}{4}x - \frac{1}{2}$		

12) $m = 3$ (^x-1, ^y2)

$$y = mx + b$$

$$y = 3x + b$$

sub
P

$$\begin{aligned} 2 &= 3(-1) + b \\ 2 &= -3 + b \\ 2 + 3 &= -3 + 3 + b \\ 5 &= b \end{aligned}$$

$$y = 3x + 5$$

14) $m = -2$
(-3, 1)

$$y = mx + b$$

$$y = -2x + b$$

$$\begin{aligned} 1 &= -2(-3) + b \\ 1 &= 6 + b \\ 1 - 6 &= 6 - 6 + b \\ -5 &= b \end{aligned}$$

$$y = -2x - 5$$

$$22) (-1, 2) (4, 7)$$

$$y = mx + b$$

$$m = \frac{y_2 - y_1}{x_2 - x_1} = \frac{7 - 2}{4 - (-1)} = \frac{5}{5} = 1$$

$$y = 1x + b$$

$$7 = 1(4) + b$$

$$7 - 4 = 4 - 4 + b$$

$$3 = b$$

$$y = x + 3$$

$$28) (6, 4) (2, 1)$$

$$y = mx + b$$

$$m = \frac{y_2 - y_1}{x_2 - x_1} = \frac{4 - 1}{6 - 2} = \frac{3}{4}$$

$$y = \frac{3}{4}x + b$$

$$1 = \frac{3}{4}(2) + b$$

$$1 = \frac{3}{2} + b$$

$$\frac{2}{2} - \frac{3}{2} = \frac{3}{2} - \frac{3}{2} + b$$

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

$$y = \frac{3}{4}x - \frac{1}{2}$$

$$30) (0, 3) (-1, 0)$$

$$y = mx + b$$

$$m = \frac{y_2 - y_1}{x_2 - x_1} = \frac{0 - 3}{-1 - 0} = \frac{-3}{-1} = 3$$

$$y = 3x + b$$

$$3 = 3(0) + b$$

$$3 = b$$

$$y = 3x + 3$$

$$34) y\text{-int: } -4 \rightarrow (0, -4)$$

$$x\text{-int: } 1 \rightarrow (1, 0)$$

$$y = mx - 4$$

$$m = \frac{y_2 - y_1}{x_2 - x_1} = \frac{-4 - 0}{0 - 1} = \frac{-4}{-1} = 4$$

$$y = 4x - 4$$

$$30) (0,3) (-1,0)$$

$$y = mx + b$$

$$m = \frac{y_2 - y_1}{x_2 - x_1} = \frac{0 - 3}{-1 - 0} = \frac{-3}{-1} = 3$$

$$y = 3x + b$$

$$3 = 3(0) + b$$

$$3 = b$$

$$y = 3x + 3$$

$$34) y\text{-int: } -4 \rightarrow (0, -4)$$

$$x\text{-int: } 1 \rightarrow (1, 0)$$

$$y = mx - 4$$

$$m = \frac{y_2 - y_1}{x_2 - x_1} = \frac{-4 - 0}{0 - 1} = \frac{-4}{-1} = 4$$

$$y = 4x - 4$$