## HW 7.2 Writing y=mx+b

For 1-12, create the slope intercept form (y=mx+b) based on the given information.

1) Slope = 1, 
$$b = -5$$
  
 $y = x - 5$ 

2) Slope = 
$$-\frac{1}{2}$$
, y-intercept = 3
$$y = -\frac{1}{2}x + 3$$

3) Slope = 
$$\frac{1}{2}$$
,  $(0, -4)$   
 $y = \frac{1}{2}x - 4$ 

4) Slope = 
$$\frac{3}{5}$$
,  $(0, 5)$   
 $y = \frac{3}{5}x + 5$ 

5) through: 
$$(-3, -4)$$
, slope =  $\frac{5}{3}$   
 $y = \frac{5}{3}x + 1$ 

6) through: 
$$(1, 1)$$
, slope = -1  
 $y = -x + 2$ 

7) through: 
$$(-2, 2)$$
, slope =  $-\frac{6}{5}$   
$$y = -\frac{6}{5}x - \frac{2}{5}$$

8) through: 
$$(-4, 5)$$
, slope =  $-\frac{1}{2}$   
 $y = -\frac{1}{2}x + 3$ 

$$y = 5x - 11$$

10) through: 
$$(-3, -1)$$
 and  $(4, -3)$ 

$$y = -\frac{2}{7}x - \frac{13}{7}$$

$$y = -7x - 23$$

12) through: 
$$(-2, 4)$$
 and  $(0, -4)$ 

$$y = -4x - 4$$

13) Create the equation of the line which has the same slope as 2x - 5y = 10 and the same y-intercept as 4x + 7y - 21 = 0.

$$y = \frac{2}{5}x + 3$$