

find new "b"

Q3: Write the equation in slope-intercept form of the line that is parallel to the graph of each equation and passes through the given point.

1.  $y = 3x + 6$ ;  $(4, 7)$

$$7 = 3(4) + b$$

$$7 = 12 + b$$
$$-12 \quad -12$$

$$-5 = b$$

$$y = 3x - 5$$

2.  $y = x - 4$ ;  $(-2, 3)$

$$3 = -2 + b$$
$$+2 \quad +2$$

$$5 = b$$

$$y = x + 5$$

3.  $y = \frac{1}{2}x + 5$ ;  $(4, -5)$

$$-5 = \frac{1}{2}(4) + b$$

$$-5 = 2 + b$$

$$-2 \quad -2$$

$$-7 = b$$

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

4.  $y + 2x = 4$ ;  $(-1, 2)$

$$-2x \quad -2x$$

$$y = -2x + 4$$

$$2 = -2(-1) + b$$

$$2 = 2 + b$$

$$-2 \quad -2$$

$$0 = b$$

$$y = -2x + 0$$

$$y = -2x$$