

7.4 Key Concepts 1 x -Intercept of a Line Worked Example

Example: Find the x -intercept of the line described by the equation $4x - 5y = 20$.

Solution: To find the x -intercept, set $y = 0$. Then, solve the equation for x .

$$4x - 5(0) = 20$$

$$4x = 20$$

$$x = \frac{20}{4}$$

$$= 5$$

The x -intercept is 5.

Practice:

1. Find the x -intercept of the line described by the equation $5x + 2y = -10$.

2. Find the x -intercept of the line described by the equation $-3x - 2y = 6$.

Answers: 1. -2 2. -2