Unit 2, Lesson 18

Putting the Pieces Together

Let's use the slope and points to write equations.

18.1 Worked Example: Find the Slope

Identify the slope of the linear equation $3x + 2y = 7$.

Step 1:

$$3x + 2y = 7$$
$$2y = -3x + 7$$

Step 2:

$$2y = -3x + 7$$
$$y = \frac{-3}{2}x + \frac{7}{2}$$

Step 3:

The slope is $\frac{-3}{2}$.

18.2 Find the Line

Write the equation of each line using the information given.

1. The slope of the line is -2 and the y-intercept is 5.

2. The slope of the line is 3 and the x-intercept is 2.

3. The slope of the line is $\frac{4}{5}$ and a point on the line is $(5, 6)$.

4. The slope of the line is -1 and a point on the line is $(-5, -2)$.

18.3 Where's the Line?

Write the equation of the line that goes through each pair of points:

1. $(0, -4)$ and $(-8, 0)$

2. $(0, 1)$ and $(1, 3)<$

3. $(1, -3)$ and $(6, 7)$

4. $(2, 1)$ and $(4, -3)$