

Guided Notes 6.3: Standard Form

A. An equation in Standard Form is written:

$Ax + By = C$, where A and B are not both zero.

B. Write an equation in standard form of each line.

1. Slope is 2 and $(-2, 2)$ is on the line.

2. Slope is 5, and $(-2, 4)$ is on the line.

2a. Use the point-slope form. Substitute the given slope and the coordinates of the given point.

3. $(-2, -1)$ and $(0, 4)$ are on the line.

4. $(5, 2)$ and $(3, -6)$ are on the line.

C. Write an equation in standard form to model the linear situation.

1. A tank is filling up with water at a rate of 3 gallons per minute. The tank already has 3 gallons in it before it started being filled.

2. A hot tub filled with 440 gallons of water is being drained. After 1.5 hours, the amount of water had decreased to 320 gallons.

D. Identify the form of each equation.

1. $4x - 3y = 12$

2. $y - 6 = -2(x+1)$

3. $y = 2x + 7$

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

E. Rewrite each equation in standard form.

$$1. y = 3x - 5$$

$$2. y - 3 = -(x + 4)$$

$$3. y = \frac{5}{3}x - \frac{7}{3}$$

$$4. y + 2 = \frac{2}{3}(x + 3)$$

Section 6.4 Notes will be covered in class. There is no video to accompany the section so either take your own notes or get the notes from class.