

GRAPHING EQUATIONS IN STANDARD FORM

STANDARD FORM:

$$Ax + By = C$$

SLOPE-INTERCEPT FORM:

$$y = mx + b$$

STEPS:

1. Solve the equation for y
2. Plot the y-intercept
3. Use the slope to plot more points

NEED TO SOLVE FOR Y TO
GET THE EQUATION IN
SLOPE-INTERCEPT FORM

STEPS FOR SOLVING FOR Y:

$$Ax + By = C$$

1. MOVE THE X TERM TO THE OTHER SIDE

$$By = C - Ax$$

2. DIVIDE BOTH SIDES BY B

$$y = \frac{C - Ax}{B}$$

EXAMPLE FOR SOLVING FOR Y:

$$3x + 5y = 10$$

1. MOVE THE X TERM TO THE OTHER SIDE

$$5y = 10 - 3x$$

2. DIVIDE BOTH SIDES BY B

$$y = \frac{10 - 3x}{5}$$

$$y = \frac{10}{5} - \frac{3}{5}x$$

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

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

GRAPHING EQUATIONS IN STANDARD FORM

PRACTICE SOLVING FOR Y:

$$6x - 7y = 21$$

1. MOVE THE X TERM TO THE OTHER SIDE

2. DIVIDE BOTH SIDES BY B

PRACTICE SOLVING FOR Y:

$$-16x + 8y = 24$$

1. MOVE THE X TERM TO THE OTHER SIDE

2. DIVIDE BOTH SIDES BY B

PRACTICE SOLVING FOR Y:

$$4x - 3y = 19$$

1. MOVE THE X TERM TO THE OTHER SIDE

2. DIVIDE BOTH SIDES BY B