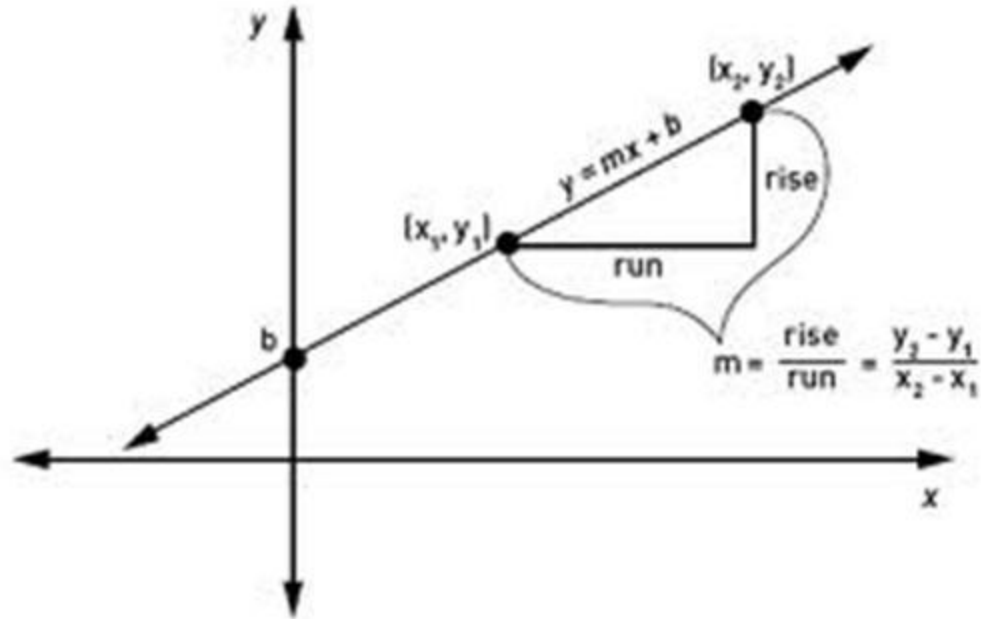


# Slope-Intercept Form



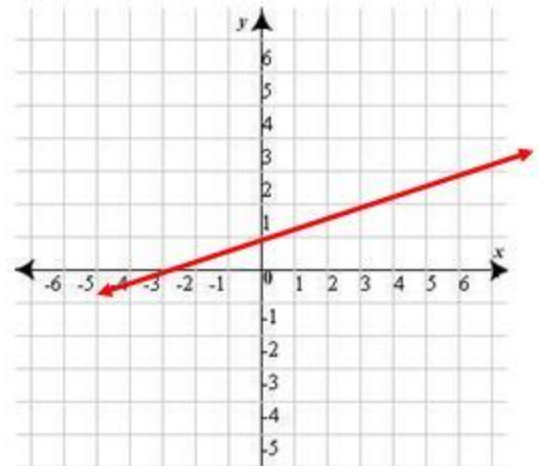
# Slope-Intercept Form

A linear equation of the form  $y = mx + b$  is written in slope-intercept form where  $m$  is the slope and  $b$  is the y-intercept of the equation's graph.

$$y = mX + b$$

↑                    ↑  
slope            y-intercept

$$y = \frac{1}{3}X + 1$$



# Slope-Intercept Form

Identify the slope and y-intercept.

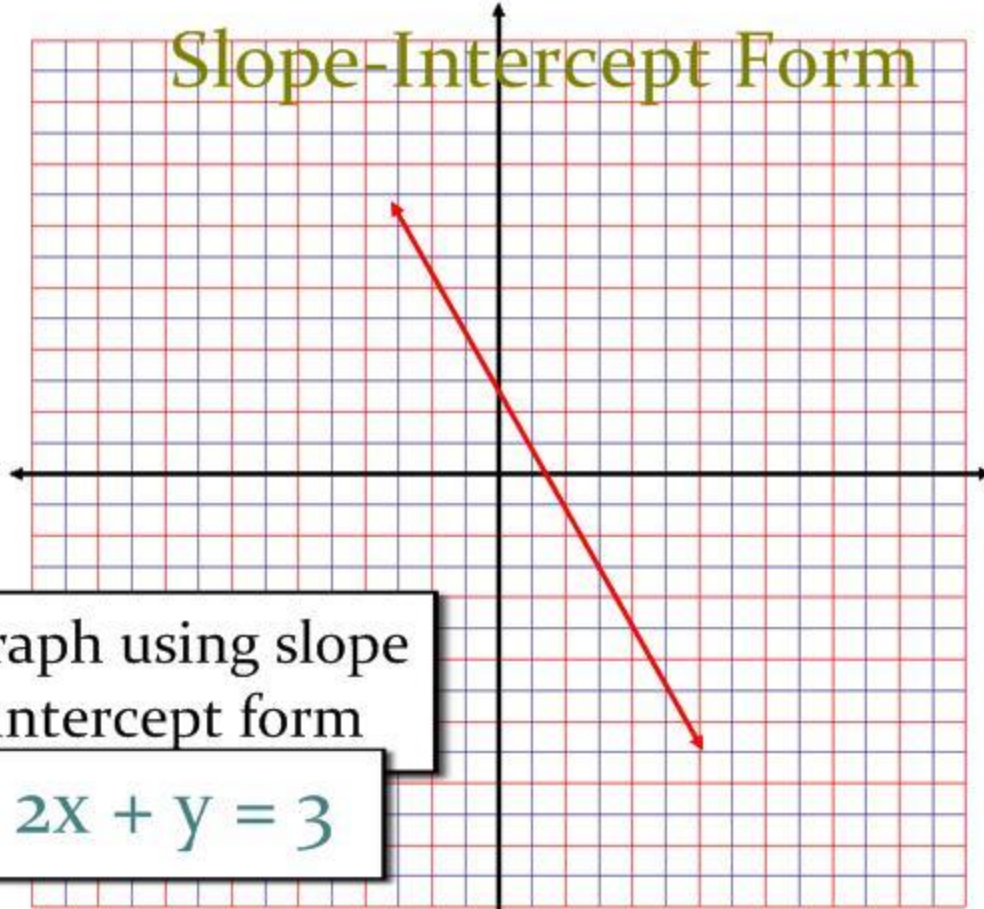
$$y = 3x + 4$$

$$m = \boxed{\bullet}$$
$$b = \boxed{\bullet}$$

$$3x - 3y = 12$$

$$m = \boxed{\bullet}$$
$$b = \boxed{\bullet}$$

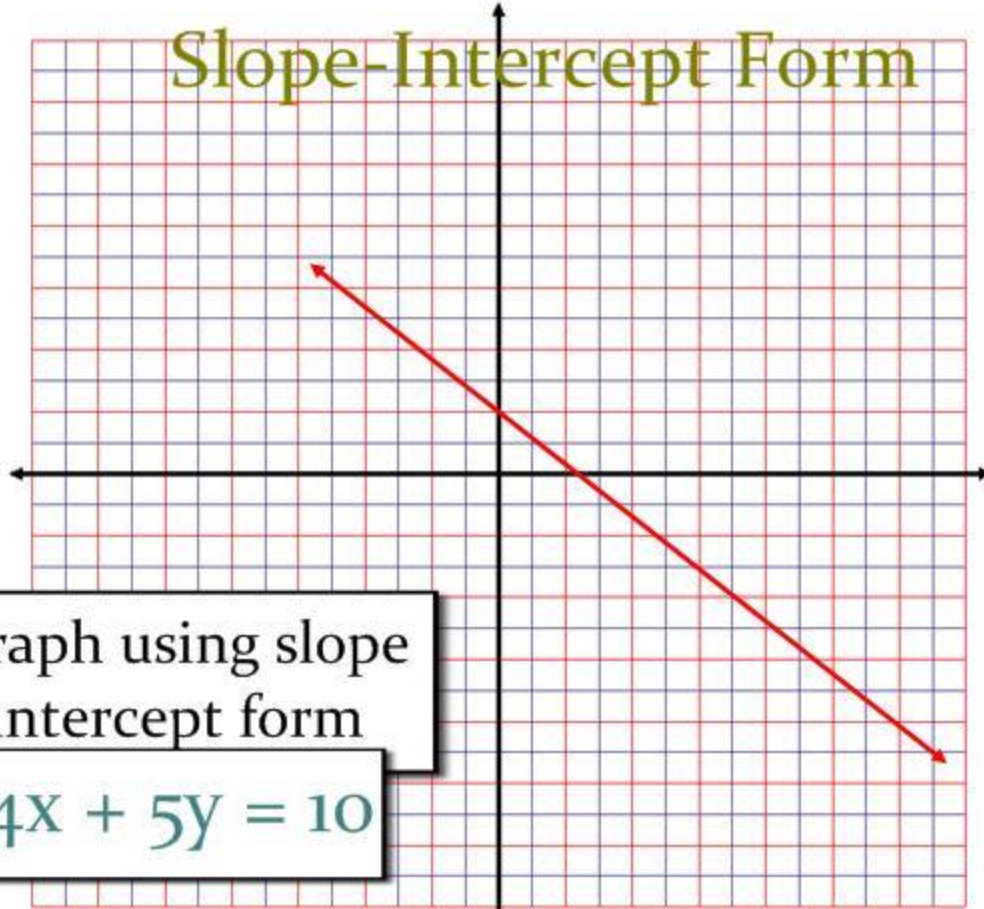
# Slope-Intercept Form



Graph using slope  
intercept form

$$2x + y = 3$$

# Slope-Intercept Form



Graph using slope  
intercept form

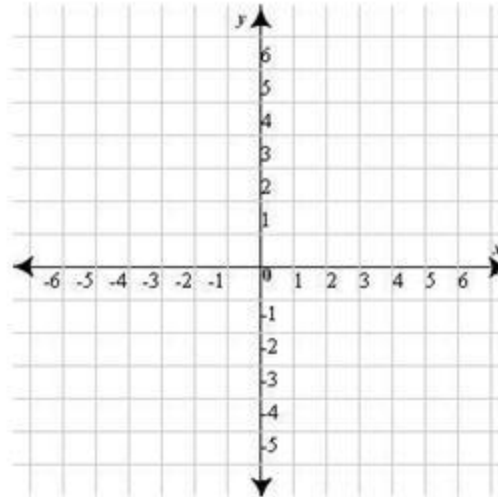
$$4X + 5y = 10$$

## Slope-Intercept Form

Two lines in the same plane are parallel if they do not intersect. Parallel lines have the SAME SLOPE...

## Slope-Intercept Form

Determine the equation of the line with a slope of 3 that passes through the point (-2, 1)



## Slope-Intercept Form

Determine the equation of the line with a slope of -0.6 that passes through the point (1, 24)

