GRAPHING LINES USING SLOPE-INTERCEPT FORM

$*y = mx + b*$

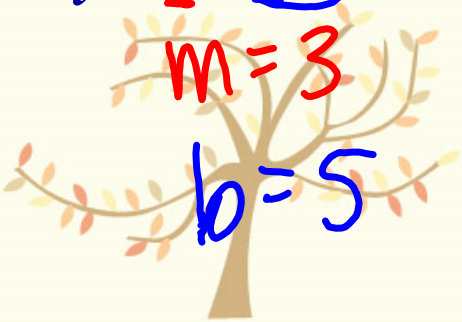
"Solve for y"

slope

y-intercept ← cross the y-axis

Find the slope and y-intercept of each equation.

1. $y = 3x + 5$



$m = 3$

$b = 5$

2. $y = \frac{1}{2}x - 4$

$m = \frac{1}{2}$

$b = -4$

3. $2x + y = 7$

$-2x \quad -2x$

$y = 7 - 2x$

$m = -2$

$b = 7$

4. $6x + 3y = -9$

$-6x \quad -6x$

$\frac{3y}{3} = \frac{-9}{3} - \frac{6x}{3}$

$y = -3 - 2x$

$m = -2$

$b = -3$

5. $3x + 4y = 8$

$-3x \quad -3x$

$\frac{4y}{4} = \frac{8}{4} - \frac{3x}{4}$

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

$m = -\frac{3}{4} \quad b = 2$

6. $5x + 3y = 6$

$-5x \quad -5x$

$\frac{-3y}{-3} = \frac{6}{-3} - \frac{5x}{-3}$

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

$m = \frac{5}{3} \quad b = -2$