

1

The equation $y = mx + b$ is written in a large, bold, blue, sans-serif font. The letters have a slight 3D effect with a red outline and a white shadow. The equation is tilted upwards from left to right.



Find the **y-intercept** and the **slope** for each of the following.

*You have
5 minutes.*

a) $5y - 10 = 15x - 30$

b) $4(x + 3) + 2y = 11$

c) $2(y - 7) + 2 = 3(x - 4) + y$

2

y-int.: $\frac{-4}{\quad}$

slope: $\frac{3}{\quad}$

a) $5y - 10 = 15x - 30$

$5y = 15x - 30 + 10$

$\frac{5}{5}y = \frac{15}{5}x - \frac{20}{5}$

$y = 3x - 4$

3

y-int.: -1/2

slope: -2

b) $4(x+3)+2y=11$
 $4x+12+2y=11$
 $2y=11-4x-12$
 $2y=-4x-1$
 $\frac{2y}{2}=\frac{-4x-1}{2}$
 $y=-2x-\frac{1}{2}$

$y = mx + b$

4

y-int.: 0

slope: 3

c) $2(y-7)+2=3(x-4)+y$
 $2y-14+2=3x-12+y$
 $2y-y=3x-12+14-2$
 $y=3x+0$
 $y=3x$

$x=5$