

# Finding the x- and y-intercepts of linear equations in standard form - Notes

Find the x- and y-intercepts of each line. Show your work. Write your answers as ordered pairs.

1)  $2x + 5y = -20$

x-int:  $(-10, 0)$

y-int:  $(0, -4)$

$$2x + 5(0) = -20$$

$$\frac{2x}{2} = \frac{-20}{2}$$

$$x = -10$$

$$2(0) + 5y = -20$$

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

$$y = -4$$

2)  $3x - 4y = 4$

x-int:  $(\frac{4}{3}, 0)$

y-int:  $(0, -1)$

$$3x - 4(0) = 4$$

$$\frac{3x}{3} = \frac{4}{3}$$

$$x = \frac{4}{3}$$

$$3(0) - 4y = 4$$

$$-4y = 4$$

$$\frac{-4y}{-4} = \frac{4}{-4}$$

$$y = -1$$

3)  $x - y = -4$

x-int:  $(-4, 0)$

y-int:  $(0, 4)$

$$x - 0 = -4 \quad 0 - 1y = -4$$

$$x = -4$$

$$\frac{-1y}{-1} = \frac{-4}{-1}$$

$$y = 4$$