

CW # 5.6 finding intercepts

goals 1.

journal

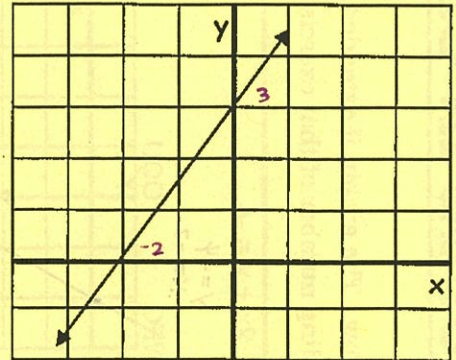
1. The x-intercept is where the line CROSSES X- AXIS.
2. The y-intercept is where the line CROSSES Y- AXIS.
3. Would a vertical line have a y-intercept? Explain. (Use the graph below for reference.)

examples

1. Use the graph to find the x- and y- intercept.

$$x = -2$$

$$y = 3$$



2. Use the line $5x + 2y = 20$ to...

a.) find the x-intercept.

$$\text{LET } y = 0$$

$$5x = 20$$

$$\boxed{x = 4}$$

b.) find the y-intercept.

$$\text{LET } x = 0$$

$$2y = 20$$

$$\boxed{y = 10}$$

3. Use the line $3x - 4y = 12$ to...

a.) find the x-intercept.

$$\text{LET } y = 0$$

$$3x = 12$$

$$\boxed{x = 4}$$

b.) find the y-intercept.

$$\text{LET } x = 0$$

$$-4y = 12$$

$$\boxed{y = -3}$$

4. Use the line $5x - 2y = 2$ to...

a.) find the x-intercept.

$$\text{LET } y = 0$$

$$5x = 2$$

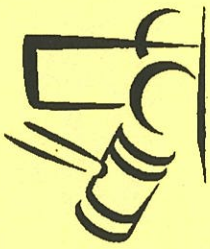
$$\boxed{x = \frac{2}{5}}$$

b.) find the y-intercept.

$$\text{LET } x = 0$$

$$-2y = 2$$

$$\boxed{y = -1}$$



WHY ARE THERE RULES IN CROQUET...?

Use the x- and y-intercept to graph each equation below. The graph, if extended, will cross some letters. Print these letters in each box that contains the corresponding number of that exercise.

<p>1. $3x + y = 3$ $y = -3x + 3$ $y = 3$ $x = 1$</p>	<p>2. $2x - 3y = 6$ $x = 3$ $y = -2$</p>	<p>3. $2x + y = -4$ $y = -4$ $x = -2$</p>	<p>4. $2x - 2y = -6$ $x = -3$ $y = 3$</p>
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<p>5. $2y = 2 + x$ $x = -2$ $y = 1$</p>	<p>6. $x + 2y = 3$ $x = 3$ $y = 0$ $y = 1.5$</p>	<p>7. $y = x - 1$ $y = -1$ $x = 1$</p>	<p>8. $x - y = 4$ $x = 4$ $y = -4$</p>
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1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	7	8	8	8	8
	S	O	T	H	A	T	W	E	C	A	N	H	A	N	J	V	A	V	E	L	A	W	N	D	O	R	D	E	R		