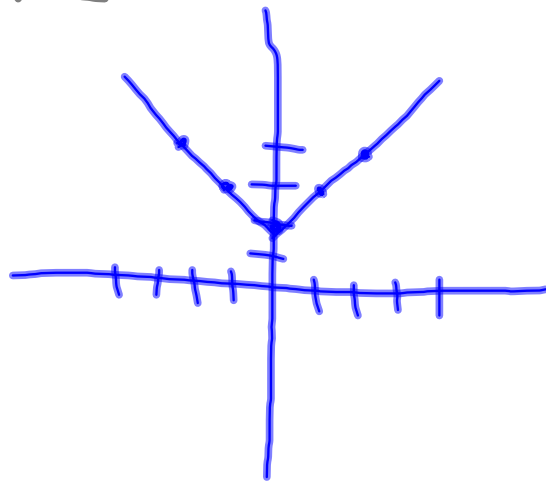


## 2.2 Graphing

x-process-y table

Ex:  $y = |x| + 2$

x	P	Y
-2	$  -2   + 2$	4
-1	$  -1   + 2$	3
0	$  0   + 2$	2
1	$  1   + 2$	3
2	$  2   + 2$	4



## Intercept method

X-intercept: where the graph touches the x-axis

y-intercept: where the graph touches the y-axis

- to find the  $x$ -intercept  
let  $y=0$  and solve for  $x$
- to find the  $y$ -intercept  
let  $x=0$  and solve for  $y$

Write intercepts as ordered pairs  
 $(0, )$   $(, 0)$

Find the x + y intercept of :

$$2x + y = 6 \quad y = 6 - 2x$$

$$2(0) + y = 6$$

$$y = 6$$

$$(0, 6)$$

$$2x + 0 = 6$$

$$2x = 6$$

$$x = 3$$

$$(3, 0)$$

x	P	Y
-1	$6 - 2(-1)$	8
0		6
1	$6 - 2(1)$	4
2	$6 - 2(2)$	2
3		0

$$y = x^3 - 16x$$

$$y = 0^3 - 16(0) = 0 \quad (0,0)$$

$$y = x(x^2 - 16)$$

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

$$x=0 \quad x+4=0 \quad x-4=0$$

$$(0,0) \quad (-4,0) \quad (4,0)$$

HW: p. 105

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