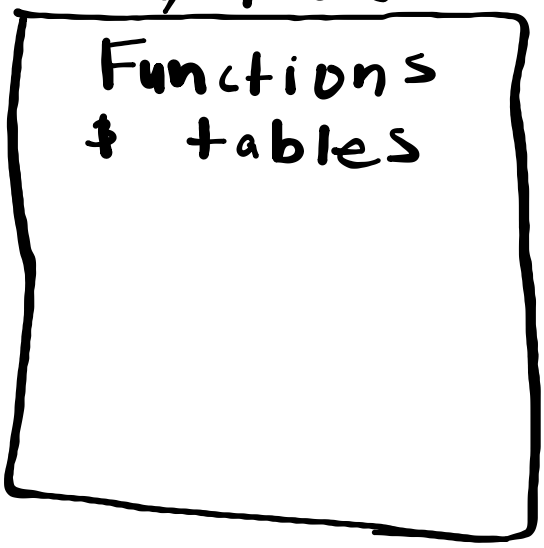
Memory Box



Warm-up

* Functions represent a relationship between two things that is written as an equation.
* Can be written in function notation, instead y=.....

Ex f(x), g(x), ect.

* Can be evaluated in the form of a table to help us graph.
* g(x), f(x), k(x), Letters in front of your function are only labels & don't change anything

Evaluating functions

Pemdas

Ex. $f(x) = 3x^2 + 4$

Find $f(-2) = 3(-2)^2 + 4$

$f(-2) = 3(4) + 4$

$f(-2) = 12 + 4$

$f(-2) = 16$

* $f(-2)$ means when you plug -2 to the function f, you get 16.

Pemdas

Ex. $f(x) = 2x^2 + 4$

$f(-2) = 2(-2)^2 + 4$

$f(-2) = 2(4) + 4$

$f(-2) = 8 + 4$

$f(-2) = 12$

* $f(-2)$: when you plug -2 into $f(x)$ you get.

Ex. $K(x) = x^2 - 12$

find $K(4) = (4)^2 - 12$

$K(4) = 16 - 12$

$K(4) = 4$

* when you plug 4 into the function K, you get 4

Ex Like #5

$g(x) = \frac{x}{4} - 2$

$g(4) = \frac{(4)}{4} - 2$

$g(4) = 1 - 2$

$g(4) = -1$

$g(12) = \frac{(12)}{4} - 2$

$g(12) = 3 - 2$

$g(12) = 1$

x	g(x)
4	-1
8	0
12	1
16	2
20	3

$g(8) = \frac{(8)}{4} - 2$

$g(8) = 2 - 2$

$g(8) = 0$

x	f(x)
4	-2
8	-1
16	1
24	3
28	4

$f(x) = \frac{x}{4} - 3$

$f(4) = \frac{(4)}{4} - 3$

$f(4) = 1 - 3$

$f(4) = -2$

$f(8) = \frac{(8)}{4} - 3$

$f(8) = 2 - 3$

$f(8) = -1$

$f(16) = \frac{(16)}{4} - 3$

$f(16) = 4 - 3$

$f(16) = 1$

$f(24) = \frac{(24)}{4} - 3$

$f(24) = 6 - 3$

$f(24) = 3$