

April 18th

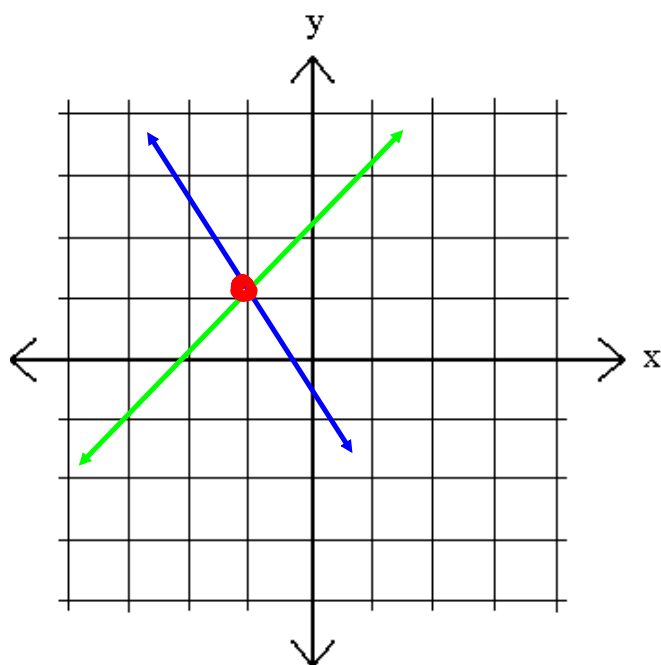
Due Today: Delta

Due Next: 11.5 hw

Unit 11: Function Operations

Lesson 11.5: Solving systems of Functions graphically

Remember.... Unit 5: Linear Systems



Solving Graphically

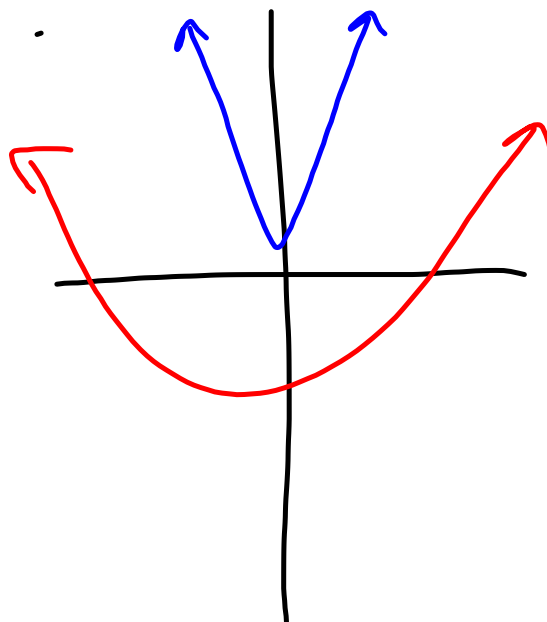
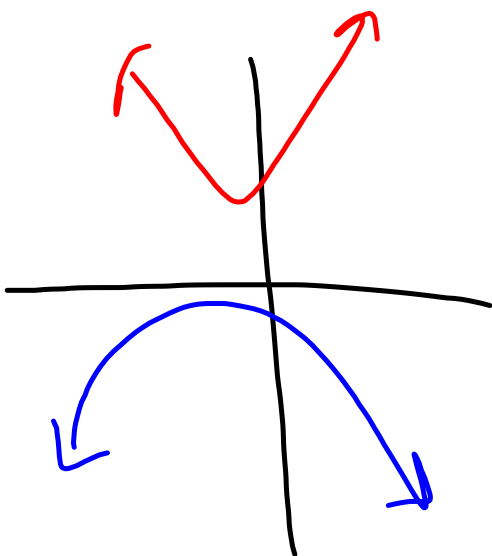
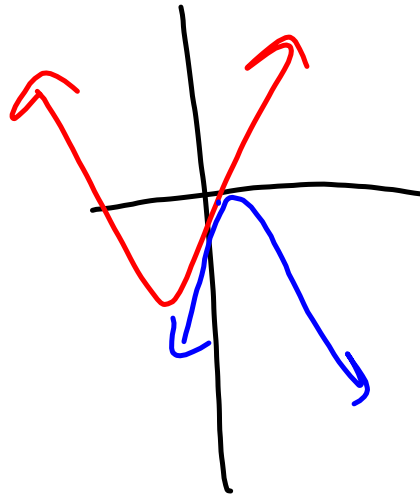
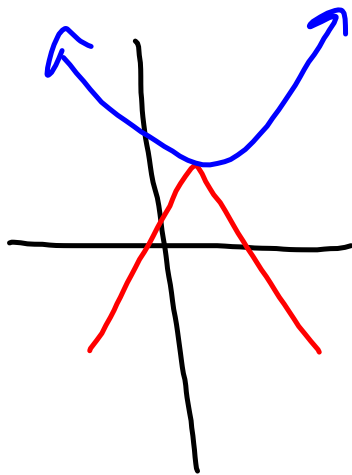
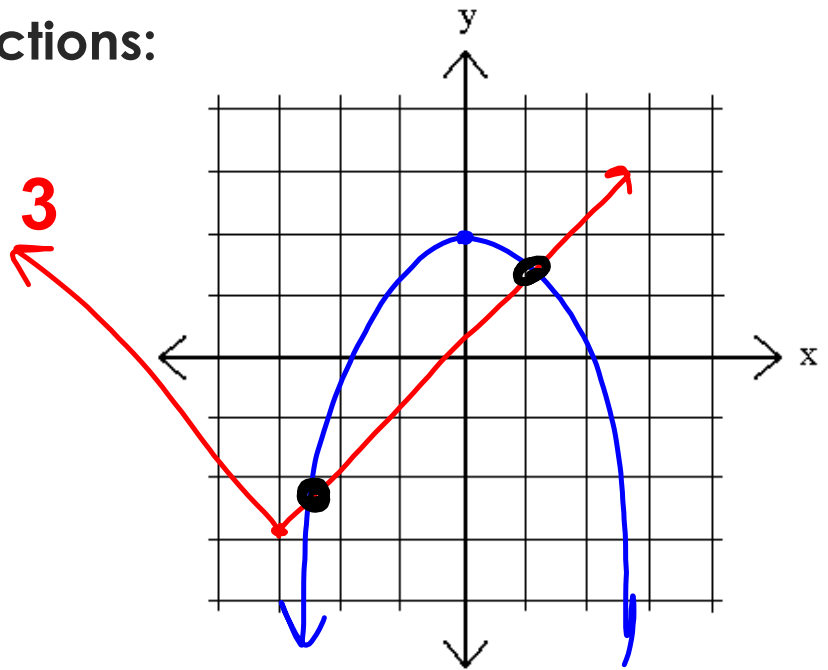
Solving with Substitution

Solving with Elimination

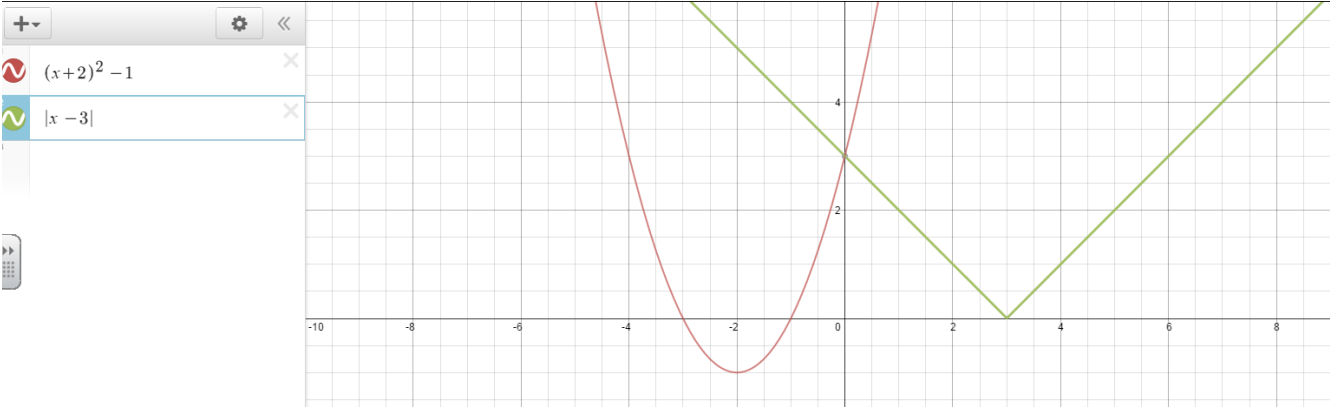
Systems of any Functions:

$$f(x) = |x + 3| - 3$$

$$g(x) = -x^2 + 2$$



DESMOS.COM



Go to [Desmos.com](https://www.desmos.com) and launch the calculator.

1. Explore:

a. Enter $f(x) = (x+3)^2 - 4$ into equation 1

Enter $g(x) = -|x+3| + 2$ into equation 2

b. Sketch a picture of the graphs here:

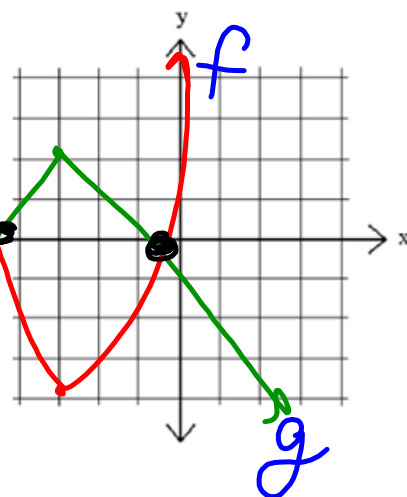
c. At how many points does $f(x) = g(x)$? 2

d. State the coordinates of the point(s) where the functions are equal:

$(-1, 0)$, $(-5, 0)$

e. When $x = 0$, which function is larger? $f(x)$

f. When $x = -3$, which function is larger? $g(x)$



Unit 11: Function Operations

Lesson #	Name	Recap	HW
11.1	Families of Functions		HW 11.1
11.2	Domain and Range of Functions		HW 11.2
11.3	Shifting Functions		Finish 11.3 QUIZ FRIDAY
11.4	QUIZ + Delta		Delta
11.5	Solving Systems Graphically		HW 11.5 * Calculator *

