

TEAM BUILDER

Name 2 things you consider yourself to be very good at.

Can be ANYTHING!

Jan 11-9:54 AM

LT 5.1

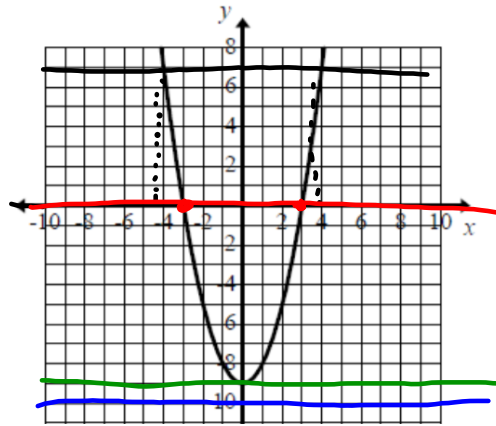
Topic - 5.1 - Solve by Graphs

How can I solve using real-world situations and translate between representations.

Sep 10-3:04 PM

5.1 A-B Solve by Graphing finished

Solve by Graphing



When $f(x)=7$
 $y=7$
 $x=-4$
 $x=4$

When $f(x)=-9$
 $x=0$

When $f(x)=0$
 $y=0$
 $x=-3$
 $x=3$

When $f(x)=-10$
 no solution

Dec 3-10:39 AM

Solve by Graphing

Graph the function and find the solutions

$$f(x) = x^2 - x - 9$$

When $f(x)=11$

$y=11$

$x=-4, 5$

When $f(x)=7$

$y=7$

$y = x^2 - x - 9$

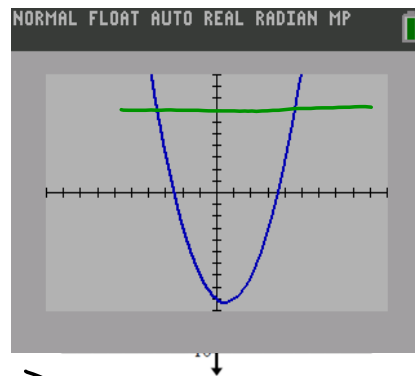
$7 = x^2 - x - 9$

$x = -3.5$

$x = 4.5$

When $f(x)=-11$

no solutions



Dec 2-12:33 PM

5.1 A-B Solve by Graphing finished

Solve by Graphing

Graph the function and find:

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

Solve:

$$-2x^2 - 4x - 2 = 0$$
$$y = -2x^2 - 4x - 2$$
$$0 = -2x^2 - 4x - 2$$
$$x = -1$$

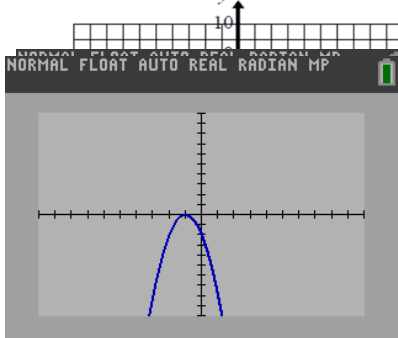
Solve:

$$-2x^2 - 4x - 2 = -20$$
$$-2x^2 - 4x + 18 = 0 \quad -4.16 \quad 2.16$$

Solve:

$$-2x^2 - 4x - 2 = 10$$
$$-2x^2 - 4x - 12 = 0$$

No Solutions



Dec 2-12:32 PM

Goal:

Solve by Graphing

Use graphical representations to solve equations like:

*what values of x will make equation true?

$$0 = 2x^2 - 3x + 5$$

*When $f(x) = 0$ (equation is $= 0$) the solutions are the **x-intercepts**

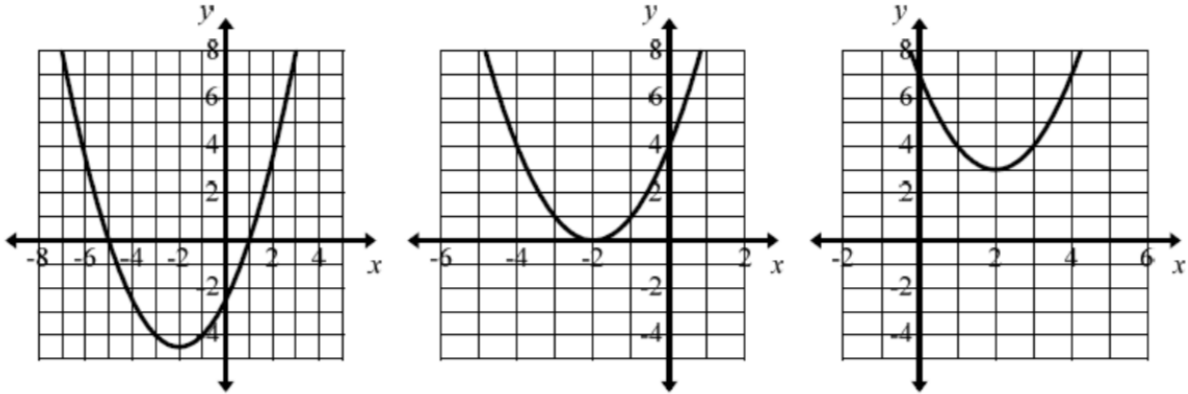
-Also called zeros or roots

Dec 2-12:24 PM

5.1 A-B Solve by Graphing finished

Solve by Graphing

how many solutions does each graph have?



Nov 21-7:31 AM

Solve by Graphing

- 1) While playing basketball this weekend Frank shot an air-ball. The ball left Frank's hands at a height of 8 feet with an initial velocity of 32 ft/sec. Use your graphing calculator, as needed. Round solutions to the nearest hundredth.

- a) Write the function that models the height of the ball in feet.

$$h(t) = -16t^2 + 32t + 8$$

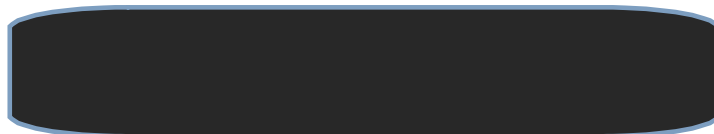
- b) What is the maximum height of the ball?
- c) How long does it take for it to reach that height?
- d) What is the height of the ball, , when it hits the ground?
- e) How long will it take to hit the ground?

Nov 21-7:31 AM

5.1 A-B Solve by Graphing finished

2) Abigail wants to make a wish while throwing a coin off a bridge into a stream. When she throws it, the coin is 112 feet above the water with an initial velocity of 50 ft/sec. Use your graphing calculator, as needed. Round solutions to the nearest hundredth.

a) Write the equation that represents the distance the coin is above the water.



b) What is the greatest height of the coin?

c) How much time will it take for the coin to hit the water?

Nov 21-7:31 AM

5.1A/B Homework



due date:

P-85 #1-7, 13-14

P-87 #3, 5

Jan 30-7:22 AM