

$$\text{Warmup } 9/10(58 \div 60) - 0.\bar{6} + (-11.7 + 8 + 3.7) + (\sqrt{5929} - 77)$$

1) Find the rule:

Input	Output
Pancake	4
Dinosaur	4
Tree	2
Math	3
Hercules	5

- Find $58 \div 60$, then multiply it by 10 , then subtract $0.\bar{6}$.
- What is $-11.7 + 8 + 3.7$?
- What would $\sqrt{5929}$ have to equal in order for this problem to work? (Today is the 9th)
- Multiply it back out to see if you are correct for #4.

Increasing: Where the y-values go up as the x values go up

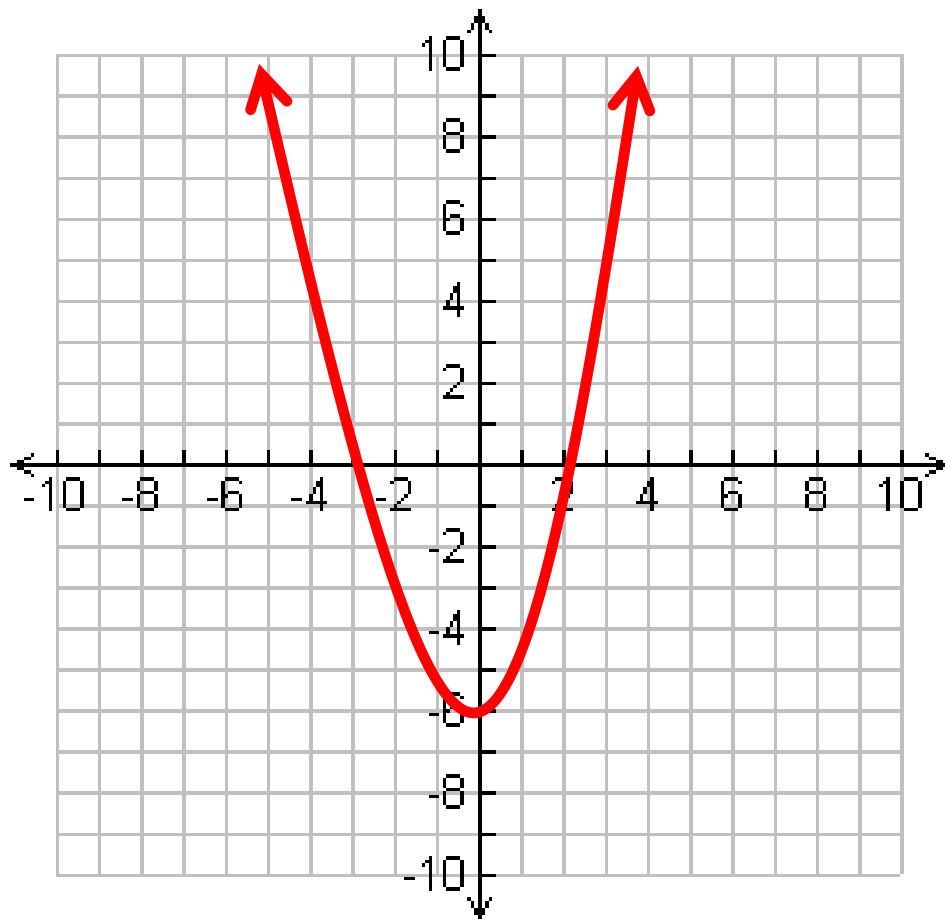
Decreasing: Where the y-values go down as the x values go up

X-intercept: Where the graph crosses the x-axis

Y-intercept: Where the graph crosses the y-axis

Slope: How steep the graph is

Key features?



X-intercepts:

Y-intercept:

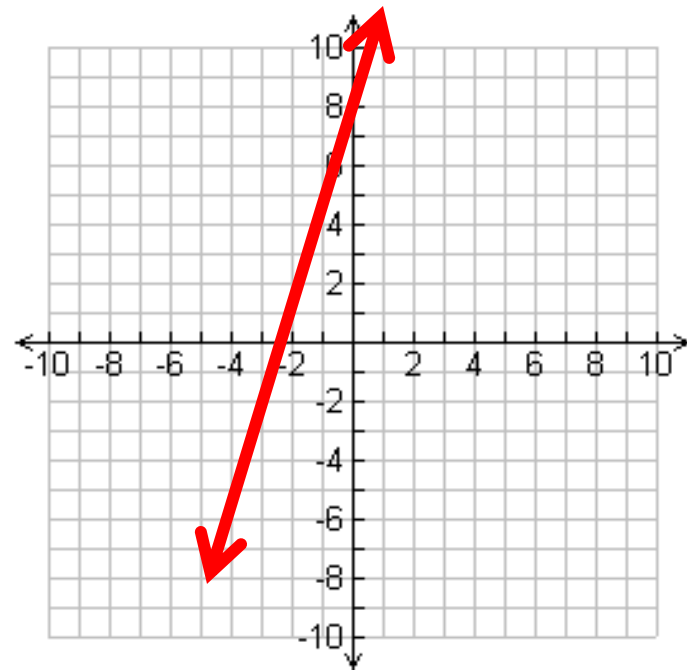
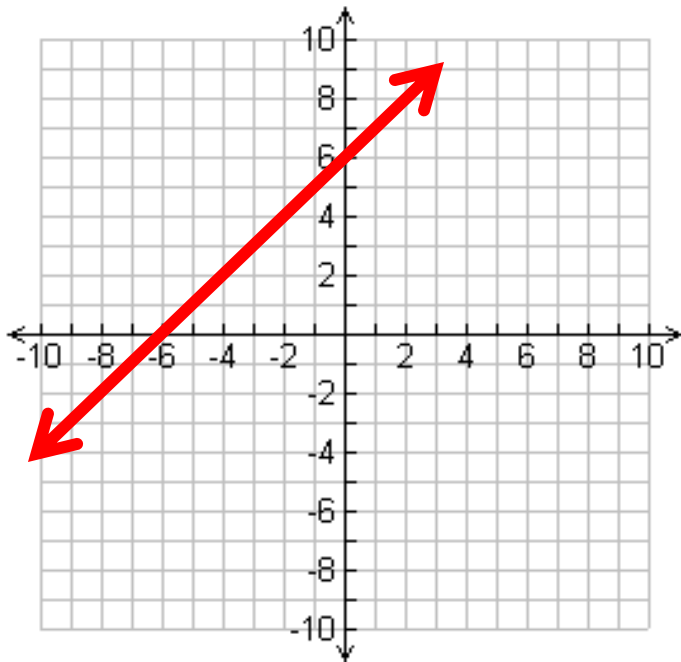
Increasing/Decreasing

Increasing/Decreasing?

Which graph has a greater **x-intercept**?

Which graph has a greater **y-intercept**?

Which graph has a greater **slope**?

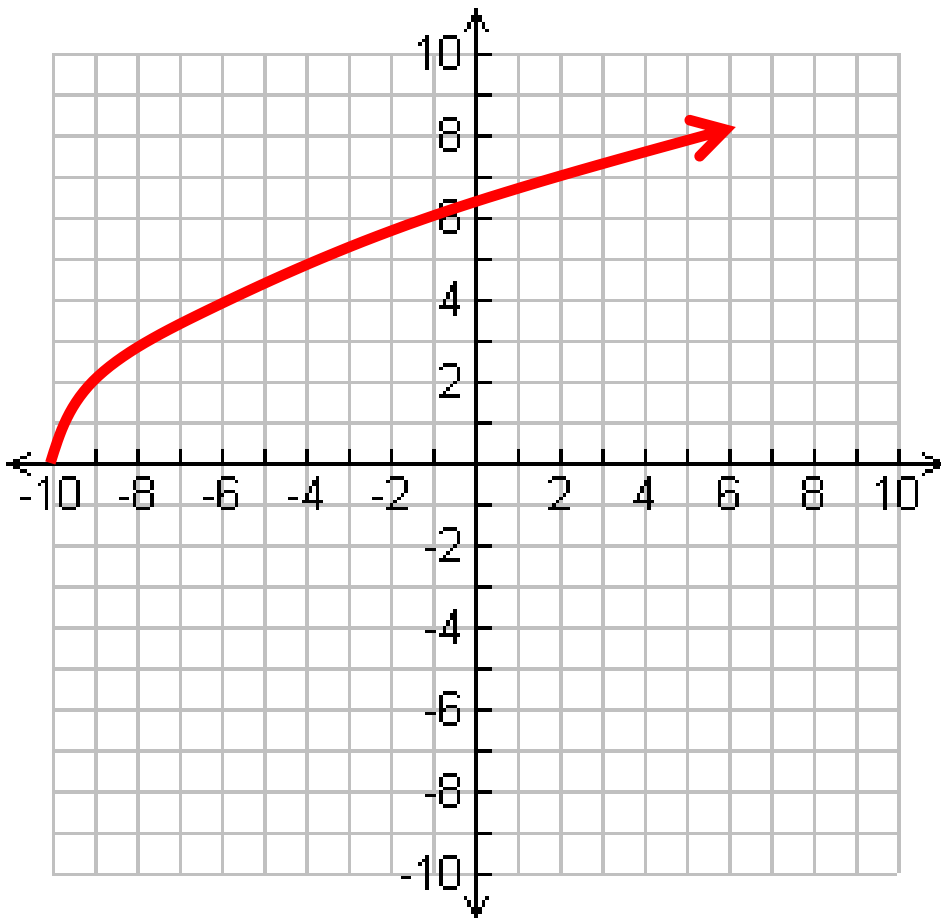


Key features?

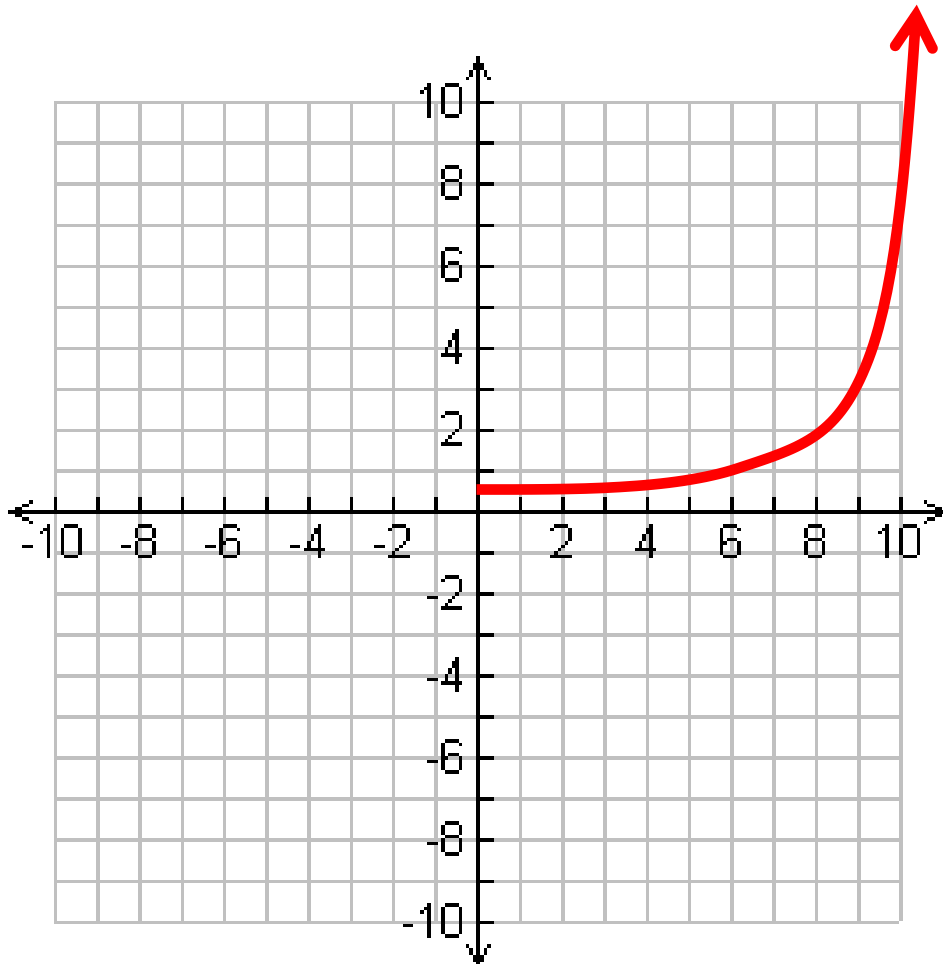
Increasing/decreasing?

X-intercept?

Y-intercept?



Key features?



Increasing/decreasing?

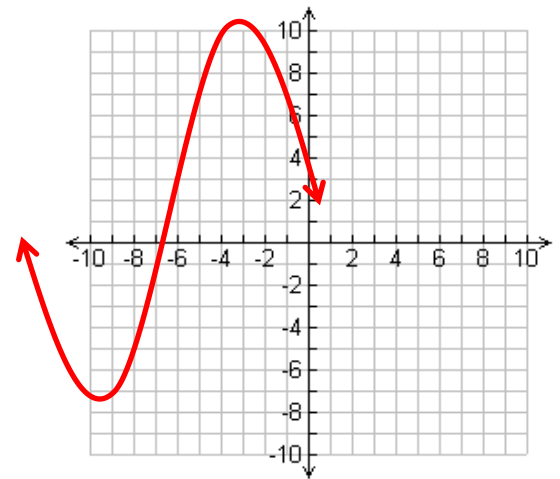
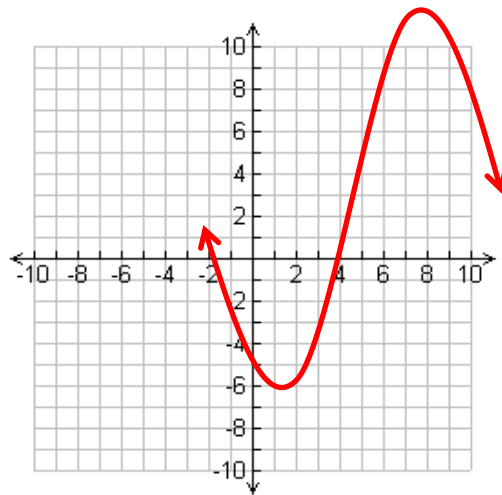
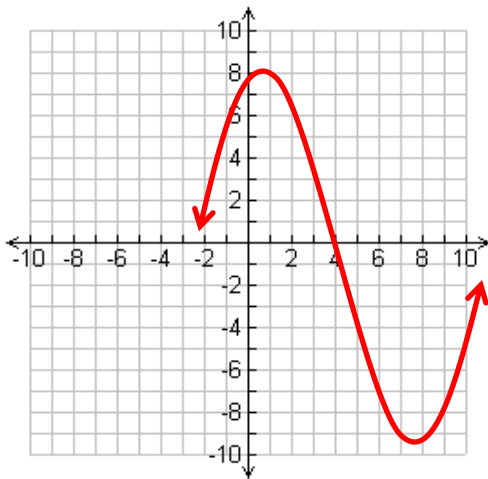
X-intercept?

Y-intercept?

Describe the slope.

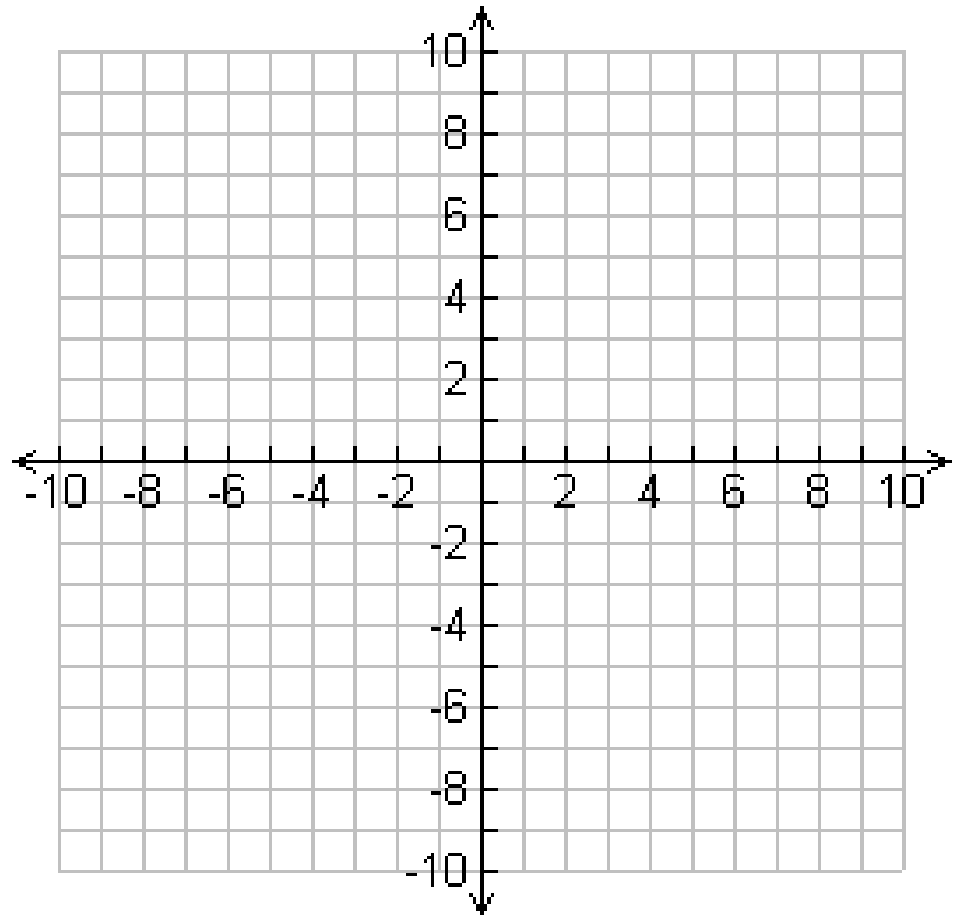
Choose the graph that is:

- Decreasing, then increasing, then decreasing (READ FROM LEFT TO RIGHT)
- Has an x-intercept of 4



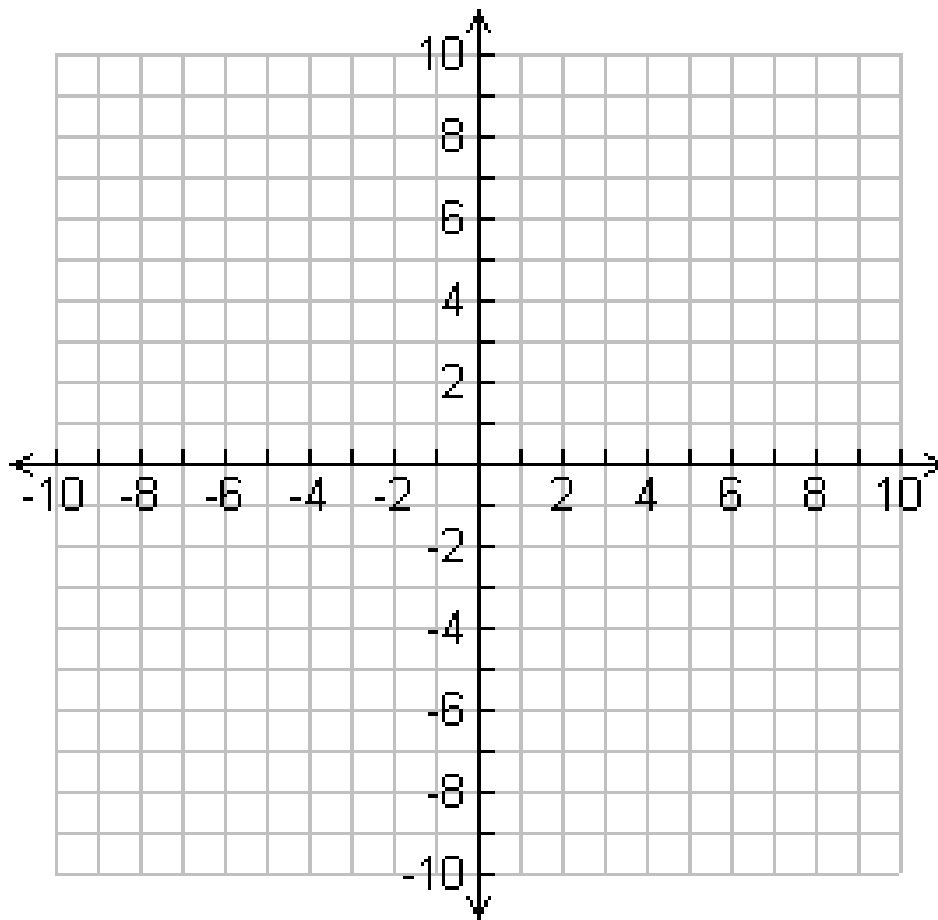
Draw a graph with the following characteristics:

- x and y-intercepts are both zero
- Always decreasing
- Slope doesn't change



Draw a graph with the following characteristics:

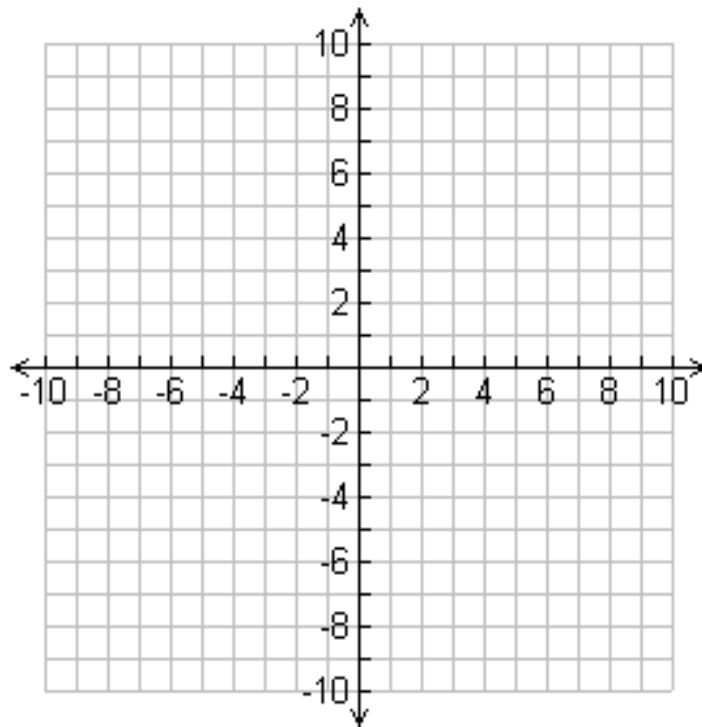
- Always increasing
- The slope changes



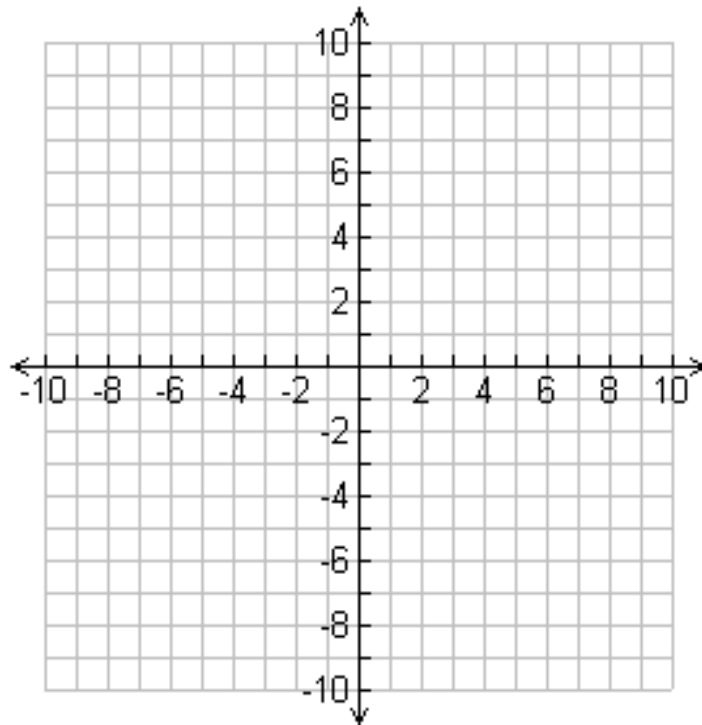
Which of these are possible?

- A) A graph that is increasing only, which has an x-intercept of -4 and a y-intercept of 6.
- B) A graph that is increasing, then decreasing, has x-intercepts of 5 and -5, and a y-intercept of -9.
- C) A graph that is increasing, then decreasing, then increasing again, that has x-intercepts of -8, 2, and 7, and a y-intercept of 4.

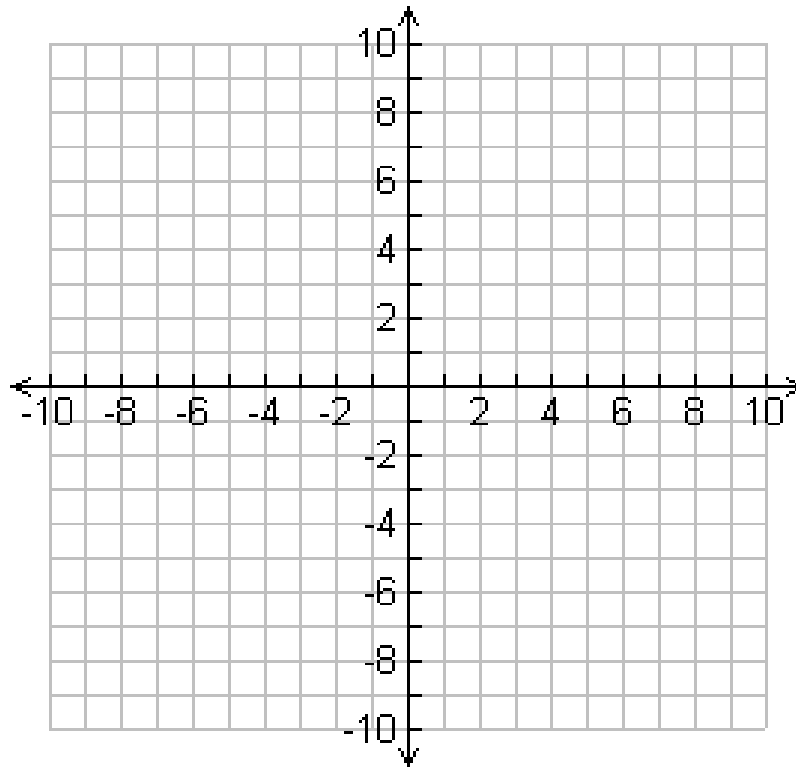
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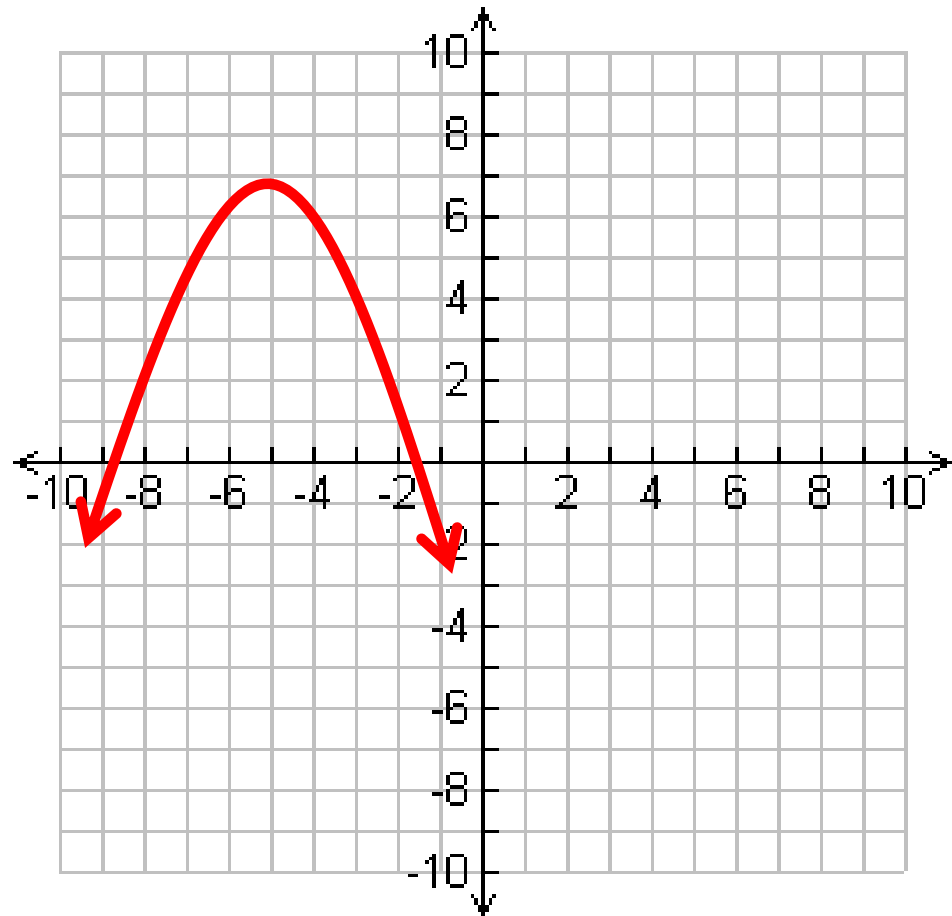
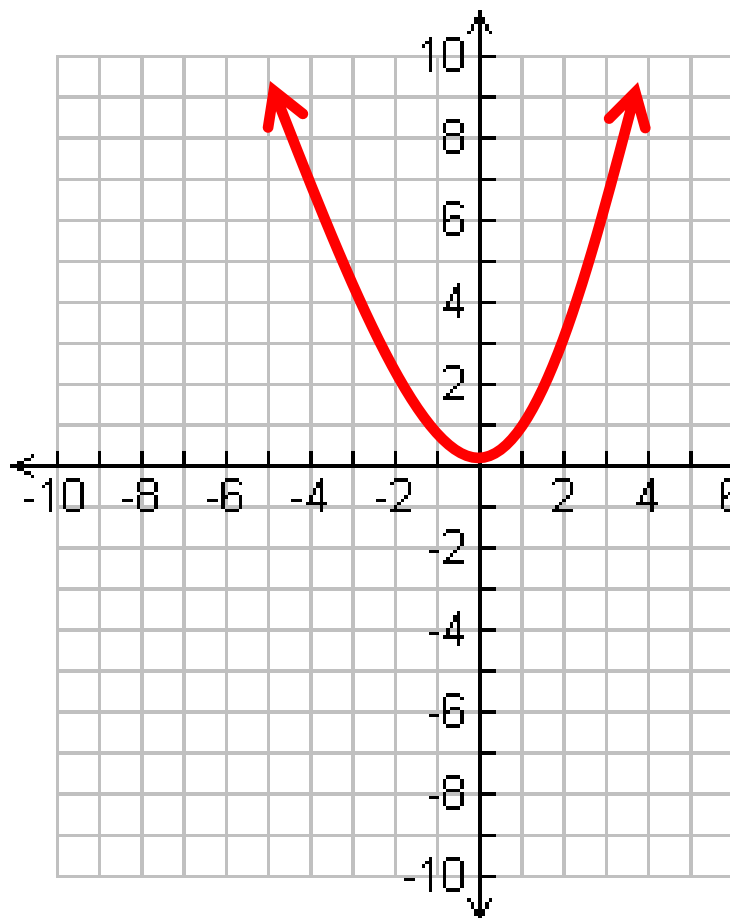
B) A graph that is increasing, then decreasing, has x-intercepts of 5 and -5, and a y-intercept of -9.



C) A graph that is increasing, then decreasing, then increasing again, that has x-intercepts of -8, 2, and 7, and a y-intercept of 4.



Maximum or Minimum Point?



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