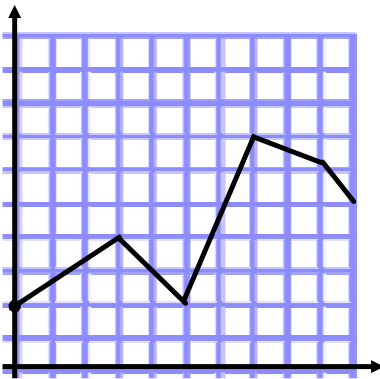


Warm-Up 8/30

Use the following situation and graph to answer the questions.

1. The graph represents the profits of Mark's company over 10 months (x). The profits are based off of 10,000 dollar increments (y).



A. What is the maximum and what does it represent?

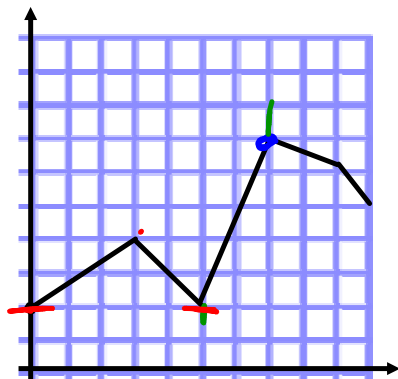
B. Is the graph increasing or decreasing between months 5 and 7? What does that mean?

C. What happened between month 1 and 5?

Warm-Up 8/30

Use the following situation and graph to answer the questions.

1. The graph represents the profits of Mark's company over 10 months (x). The profits are based off of 10,000 dollar increments (y).



A. What is the maximum and what does it represent?

$(5, 50,000)$
 \$70,000 the most money Mark's company makes

B. Is the graph increasing or decreasing between months 5 and 7? What does that mean?

increasing
 the company is getting more money

C. What happened between month 1 and 5?

the company made more \$ then made less money and ended where they started

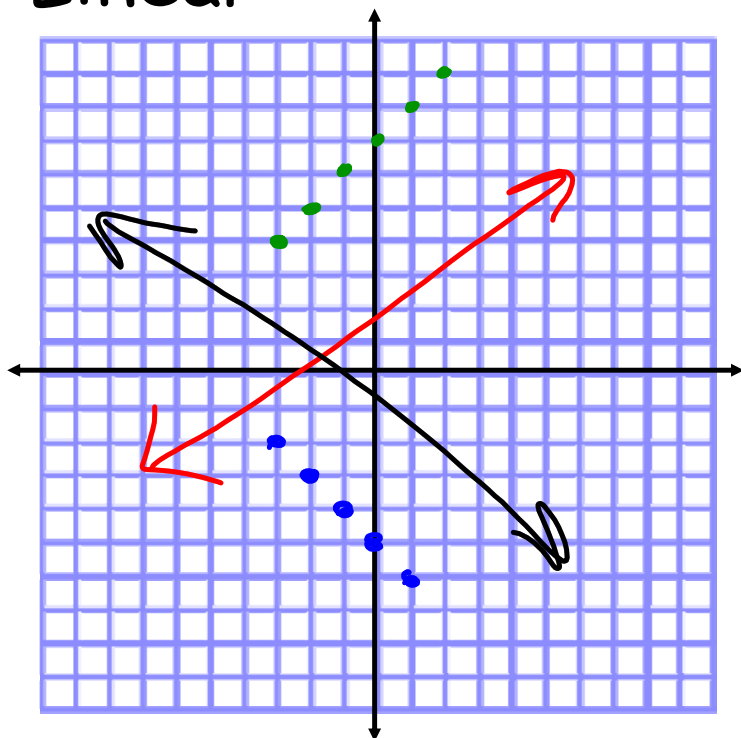
Quiz

Today's Goal

I can...

- match real world situations to their corresponding graphs and equations

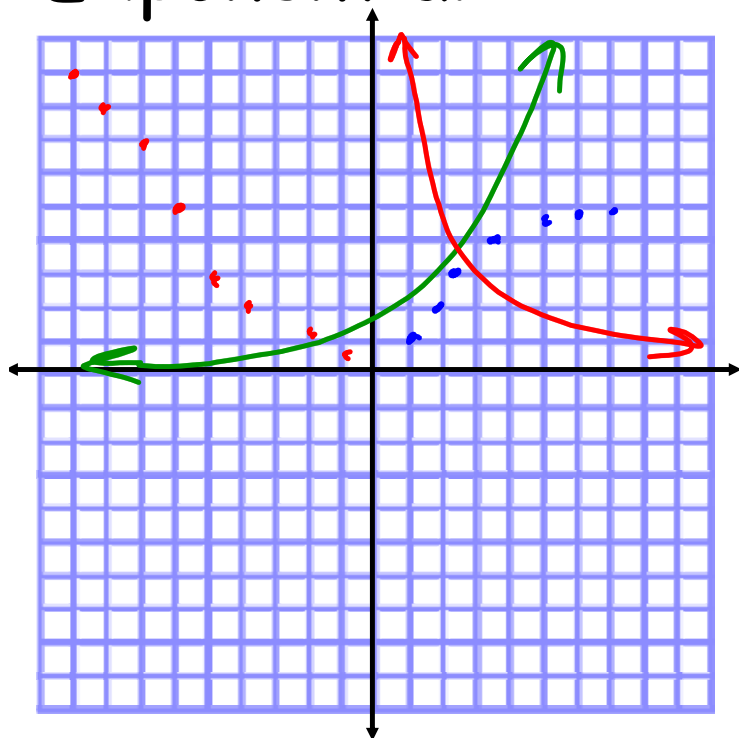
Linear



Characteristics

- can be increasing or decreasing
- constant change
- equation (no exponents and x in the numerator)
 - > $y = 3x$; $y = -4x + 3$
- graph is a line

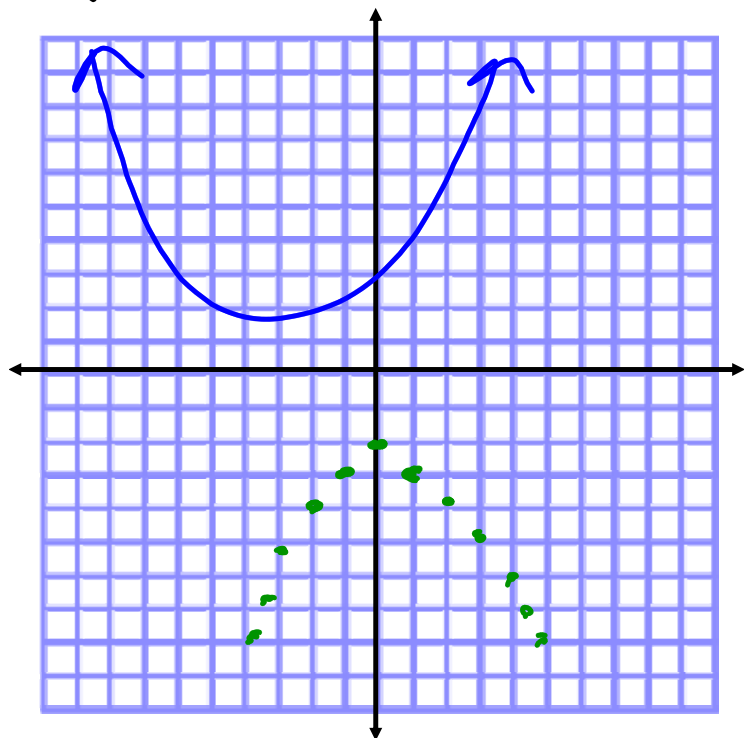
Exponential



Characteristics

- can be increasing or decreasing
- fast then slow or slow then fast change.
- equation (x in the exponent or in the denominator)
 - > $y = 3^x$; $y = x/10$
- graph is an exponential function

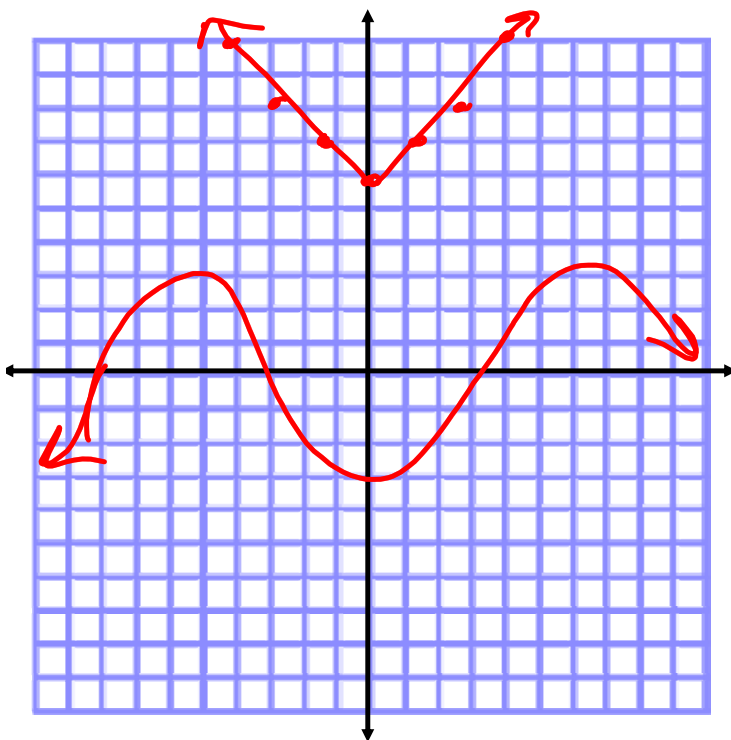
Quadratic



Characteristics

- can be increasing and/or decreasing (depending on the domain)
- fast changes
- equation (exponent is 2)
 - > $y = -x^2$; $y = x^2 + 3$
- graph is a parabola

Other



Characteristics

- all other types of functions
- will not be linear, exponential, or quadratic

Group matching
real-world activity.