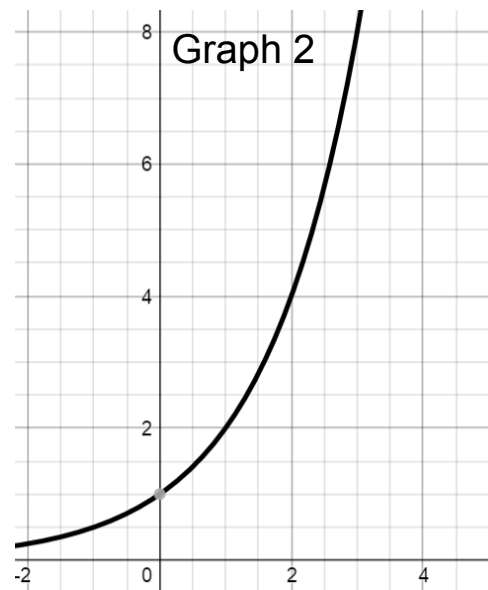
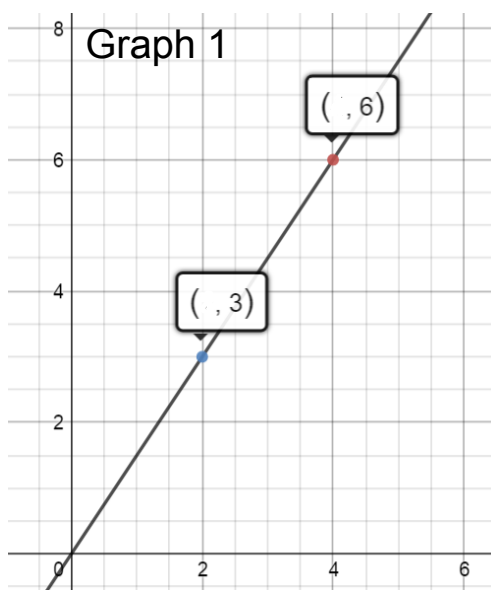


My Financial Future

Learning Goals

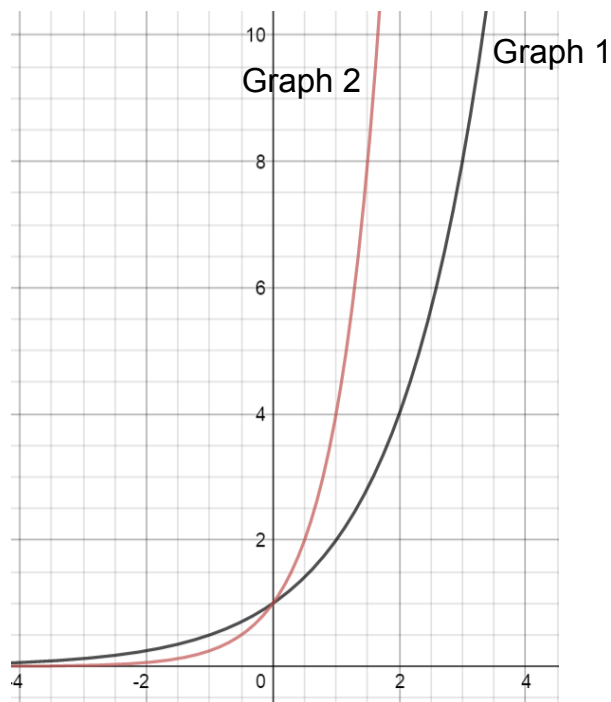
Minds on Math...Reading Graphs

Consider the graphs below. On each of the graphs, find two values (y-values) where one is twice the other. Indicate your values on the graphs. Note: The first has been done as an example.



Minds on Math...Reading Graphs (contd.)

On Graph 2, find a value that is double a value on Graph 1. Indicate these values on the graphs.



Minds on Math...True or False?

True or False? Justify your choice.

$$2000 \approx 1000(1.04)^{18}$$



Come up with a financial word problem that could be represented by the numbers in the equation.

\approx means
"approximately"

Take Action

Does doubling the interest rate halve the time it takes for an investment to double?

Justify your choice using one or more of the strategies discussed.

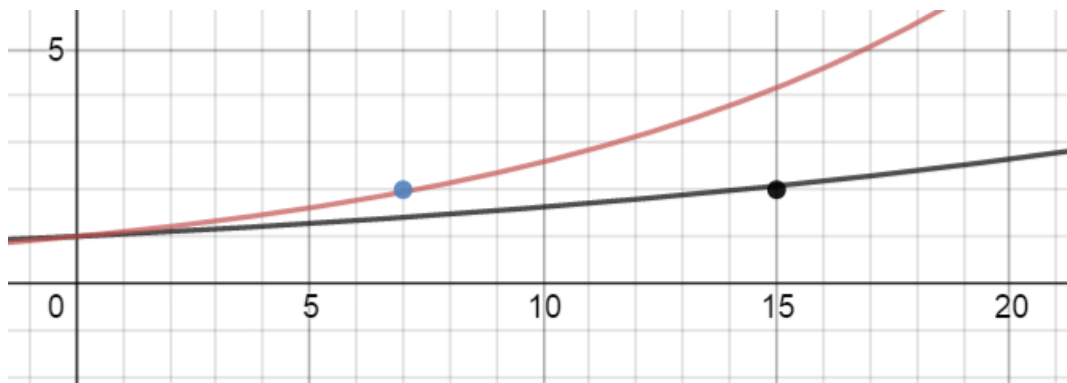
Summarizing Your Learning

In today's investigation, you might have solved the problem using either a ...

- **graphical approach** (using tech)
 - > finding a position (i.e., a time) on your second graph (double interest rate) where the amount doubles and relating this to the doubling time for the first graph
 - **Conclusion:**

- **systematic trial**
 - > substituting values into the doubling relationship (e.g., _____) for time and checking to see if the amount doubles
 - relating this time back to the original to see if the amount doubled in half the time
 - « **Conclusion:**

Graphical Strategy



Systematic Trial (Using CI Formula)

$$2000 \approx 1000(1.04)^{18}$$

$$2000 = 1000(1.08)^n$$

n	1.08^n	double?
9		

Independent Practice: Strategies for Solving Finance Problems

Using a strategy of your choice, confirm or refute the following statements:

1-By doubling the principal, the amount of an investment doubles.

2-By doubling the compounding frequency, the amount of an investment doubles.

3-By doubling the length of time that money is invested, the amount of an investment doubles.