Pathways Reading Guide M4 Section 2

Please read Module 4, section1 in your e-book, pp. 8 – 14. (Click on Module 4, then “text.”)

Be sure to *read with a pencil in hand* and attempt the examples before you read the solution given. Take notes of important definitions and ideas as you read. I don’t expect you to have 100% comprehension of everything in the section, but spending significant time trying to understand the main ideas will assist you as you work on the Investigation during our next class.

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Before reading this section, complete the table in problem #1c on page 137 in your workbook.

Watch the video on page 8 in the ebook. Be sure you understand the difference between a growth ***rate (percent change)*** and a growth ***factor.*** Come to class ready to explain the difference and how and why we obtain the growth factor from the growth rate (percent change). Be able to find the growth factor from a growth rate and vice versa. You might review the definition of *factor* on your own.

After reading the first paragraph on page 8, try to write an exponential function describing this scenario before reading on. Then check your work by reading on and/or watching the short video on p. 11. The video provides a detailed and clear explanation of how compound interest works.

Notice the graph on page 10. How does it differ from the graph of a linear function?

The video on the top of page 12 shows how to determine if a data set shows exponential growth, an important skill! Come to class ready to determine if a set of data is exponential or not – a likely eventual quiz question.

The paragraphs after the video offer a good summary of exponential functions. Is the rate of growth the same as the average rate of change?

Finally, study examples 4 and 5, then note the definitions on page 14.

The final video in this section, on the top of page 15, shows how to find a ***decay factor.*** *How do we find the growth or decay factor? Is there a general technique? How do we find percent change from the growth or decay factor?* You need to know this!!!!!!!!!