

Chapter 4 Summary

Section Objectives

How does it apply to you?

Section 1

Make a table showing exponential growth.



You can analyze a quantity that increases by the same percent each time period. *(See Examples 1 and 2.)*

Draw a graph showing exponential growth.



You can visualize exponential growth. *(See Examples 3 and 4.)*

Find an exponential growth rate.



You can determine by what percent a quantity is increasing. *(See Examples 5 and 6.)*

Section 2

Use a consumer price index.



You can describe the change in prices for consumer goods over time. *(See Examples 1 and 2.)*

Use a graph to interpret a consumer price index.



You can visualize the trends in a consumer price index over time. *(See Examples 3 and 4.)*

Compare inflation to the value of the dollar.



You can understand the relationship between inflation and the value of the dollar. *(See Examples 5 and 6.)*

Section 3

Make a table and graph showing exponential decay.



You can determine how much of a quantity that decays exponentially remains after a period of time. *(See Examples 1 and 2.)*

Calculate and use half-life.



You can determine the concentration of a drug in your body and use carbon dating to determine the age of a fossil. *(See Examples 3 and 4.)*

Find an exponential decay rate.



You can determine by what percent a quantity is decreasing. *(See Examples 5 and 6.)*

Section 4

Use straight-line depreciation.



Straight-line depreciation reduces the value of an item by the same amount each year. *(See Examples 1 and 2.)*

Use double declining-balance depreciation.



Double declining-balance depreciation reduces the value of an item by the same percent each year. *(See Examples 3 and 4.)*

Use sum of the years-digits depreciation.



Sum of the years-digits depreciation expenses more of the purchase price in the early years. *(See Examples 5 and 6.)*