

Name: _____

Date: _____

UNIT 4 • MODELING AND ANALYZING EXPONENTIAL FUNCTIONS

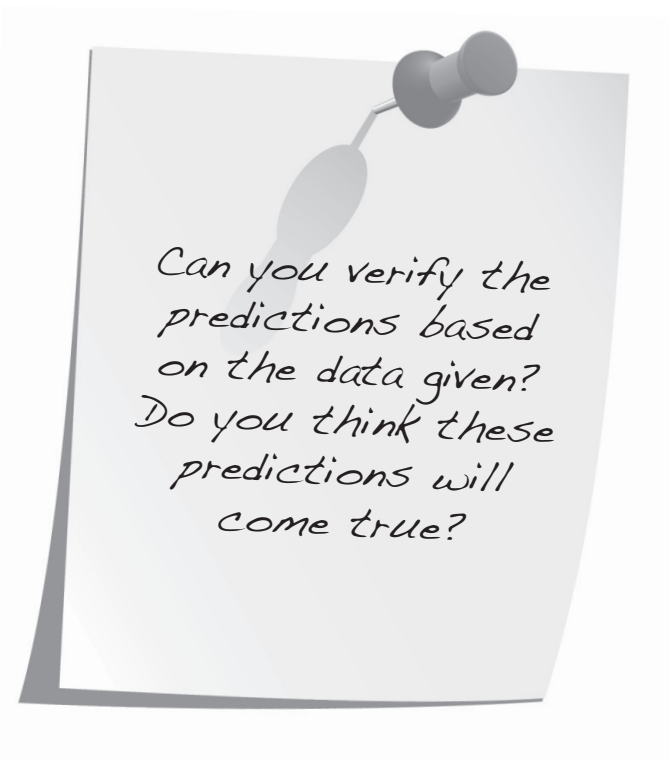
Lesson 1: Creating Exponential Equations

Problem-Based Task 4.1.1: Population Change

On opposite sides of a major city two suburban towns are experiencing population changes. One town, Town A, is growing rapidly at 5% per year and has a current population of 39,000. Town B has a declining population at a rate of 2% per year. Its current population is 55,000. Economists predict that in 5 years the populations of these two towns will be about the same, but the residents of both towns are in disbelief. The economists also claim that ten years after that, Town A will be double the size of Town B. Can you verify the predictions based on the data given? Do you think these predictions will come true?

SMP

1	2 ✓
3	4 ✓
5 ✓	6 ✓
7	8



Can you verify the predictions based on the data given? Do you think these predictions will come true?