UNIT 3 • MODELING AND ANALYZING QUADRATIC FUNCTIONS Lesson 3: Interpreting and Analyzing Quadratic Functions

Problem-Based Task 3.3.2: Window Washers

Coaching

- a. What are the known values?
- b. What are the unknown values?
- c. What type of model is needed in order to find the unknowns?
- d. What is the vertex form of a quadratic function?
- e. How can the known information be substituted into the vertex form of a quadratic function?
- f. How can you find the value of *a*, and what is the quadratic model that represents this situation?
- g. After how many seconds did the sponge fall to a height of 10 meters?
- h. What is a reasonable domain of the function? How long was the sponge in the air?