Name: Date:

UNIT 3 • MODELING AND ANALYZING QUADRATIC FUNCTIONS

Lesson 1: Creating and Solving Quadratic Equations in One Variable

Problem-Based Task 3.1.4: Window Installation

A construction company is installing a rectangular pane of stained glass at a local museum. The expression $54x^2 + 69x + 20$ represents the area of the window in square inches, and the expression 6x + 5 represents the width of the window in inches. If the window has a height of 94 inches, what are the actual width and area of the window? Recall that the area of a rectangle is equal to its width times its length (in this case, the height of the window).

SMP

1 \(\sigma \) 2 \(\sigma \)

3 \(4 \sigma \)

5 \(6 \)

7 \(\sigma \) 8

