Name: Date:

UNIT 3 • MODELING AND ANALYZING QUADRATIC FUNCTIONS

Lesson 1: Creating and Solving Quadratic Equations in One Variable

Problem-Based Task 3.1.1: Time to Splash

Nina dives into a pool from a platform 3.75 feet above the water. Her height above the water in feet, x seconds after she jumps, is given by the expression $-5(x - 0.5)^2 + 5$. How many seconds will it take Nina to hit the water?

SMP

1 \(\sqrt{2} \)

3 \(4 \sqrt{5} \)

5 \(6 \)

7 \(\sqrt{8} \)

