NAME _____

DATE _____

Module 18 Solving Radical Equations
Lesson 3 Solving Problems Using Radical
Equations

guided notes

Lesson Objective

• Solve application problems in which a radical equation must be solved.

In the length of a skid mark formula, $s = 5.5\sqrt{0.75m}$, s represents

_____ and m represents _____.

1 ▸ Find the length of a skid mark when a car goes into a skid at 60 mph.

_____

In the distance to the horizon formula, $d = 1.17\sqrt{h}$, d represents

_____, and h represents

_____.

2 ▸ A mountain climber sitting on a mountain's summit estimates that the distance

to the horizon is 45 miles. How high is the mountain's summit?

_____

In the speed of sound near Earth's surface formula, $v = 20\sqrt{t + 273}$,

v represents _____, and

t represents _____.

3 ▶ What is the temperature if sound travels at 400 meters per second?

_____

4 ▶ A 13-foot ladder leans against a building so that the bottom of the ladder rests on the ground five feet from the building. How high up the side of the building does the ladder reach?

_____

b $c = 13$

$a = 5$

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