

Chapter 10 — Squares, Square Roots, and Estimation

Worksheet A: Guided Practice

Name: _____ Grade: _____ Date: _____

1. Evaluate: $\sqrt{4}$

What number multiplied by itself equals 4?

2. Evaluate: $\sqrt{9}$

Use the perfect-squares table.

3. Is 361 a perfect square? Explain.

Check whether one whole number squares to 361.

4. Evaluate: $\sqrt{16}$

Find equal factors.

5. Evaluate: $\sqrt{289}$

Look for a number that squares to 289.

6. Is 210 a perfect square? Explain.

Check nearby perfect squares.

7. Estimate: $\sqrt{74}$

Find the perfect squares around 74.

8. Estimate: $\sqrt{115}$

Find the perfect squares around 115.

9. Estimate: $\sqrt{137}$

Find the perfect squares around 137.

10. Between which two whole numbers is $\sqrt{175}$?

Find consecutive perfect squares.

11. Is $\sqrt{215}$ closer to 14 or 15?

Compare 215 to 196 and 225.

12. Is $\sqrt{275}$ closer to 16 or 17?

Compare 275 to 256 and 289.

13. A square has area 529 cm^2 . Find the side length.

Find the square root of the area.

14. A square garden has area 576 m^2 . Find the side length.

Find the square root of 576.

-
- 15.** Explain why $\sqrt{400}$ is 20, not -20.

The radical gives the principal square root.