

Name _____ Date _____ Class _____

**SECTION
4B**

Ready to Go On? Quiz

(TAKE HOME)

4-5 Squares and Square Roots

Find the two square roots of each number.

1. 64

2. 6,084

3. 1,000,000

4. 324

5. Amy wants to put together a jigsaw puzzle that will be 24 in. \times 20 in. when finished. Will the puzzle fit on a square board with an area of 529 square inches? Explain your answer.

6. How many 6 in. \times 6 in. square tiles will fit around the edges of a square hallway that has an area of 1,296 square inches?

4-6 Estimating Square Roots

Each square root is between two integers. Name the integers.

Explain your answer.

7. $-\sqrt{56}$

8. $\sqrt{300}$

9. $-\sqrt{250}$

10. $\sqrt{860}$

11. A square quilt has an area of 28 square feet. To the nearest hundredth, what length of edging is needed to go around all the edges of the quilt?

SECTION 4B **Ready to Go On? Quiz** continued

4-6 Estimating Square Roots (continued)

12. The area of a square painting is 120 square inches. Find the length of one side of the painting to the nearest hundredth. _____

4-7 The Real Numbers

Write all the names that apply to each number.

13. 0.26

14. $\sqrt{35}$

15. $\sqrt{400}$

16. $\frac{-\sqrt{100}}{5}$

17. Give an example of an irrational number that is less than -8 .

18. Find a real number between $\sqrt{49}$ and 8. _____

4-8 The Pythagorean Theorem

Find the missing length for each right triangle. Round your answer to the nearest tenth.

19. $a = 6, b = 10, c = ?$

20. $a = 4, b = ?, c = 12$

21. $a = ?, b = 15, c = 17$

22. $a = 36, b = 48, c = ?$

23. $a = 10, b = ?, c = 25$

24. $a = ?, b = 8, c = 18$

25. Jason is putting a fence around a garden. The measures of two sides that meet at a corner are 25 feet and 38 feet. For the corner to be a right angle, what would the length of the diagonal have to be? _____