**3** **Chapter 3 Test, Form 1**

SCORE _____

*Write the letter for the correct answer in the blank at the right of each question.*

**For Questions 1–3, find each square root.**

1. $\sqrt{25}$

   **A.** 25 **B.** 5 **C.** 15 **D.** 6 1. _____

2. $-\sqrt{144}$

   **F.** 144 **G.** 12 **H.** −12 **J.** 11 2. _____

3. $\sqrt{\dfrac{9}{16}}$

   **A.** $\dfrac{3}{2}$ **B.** $\dfrac{9}{16}$ **C.** $\dfrac{3}{4}$ **D.** $-\dfrac{3}{2}$ 3. _____

4. Solve $y^2 = 64$.

   **F.** 6.4 **G.** 8 **H.** 8 or −8 **J.** −8 4. _____

**For Questions 5 and 6, estimate to the nearest whole number.**

5. $\sqrt{29}$

   **A.** 6 **B.** 5 **C.** 7 **D.** 4 5. _____

6. $\sqrt{11}$

   **F.** 2 **G.** 4 **H.** 5 **J.** 3 6. _____

7. **SPORTS** A survey of 12 students showed that 7 liked football, 10 liked basketball, and 5 liked both. How many students liked just football?

   **A.** 12 **B.** 10 **C.** 5 **D.** 2 7. _____

8. Estimate the solution of $y^2 = 21$ to the nearest integer.

   **F.** 5 or −5 **G.** 4.6 or −4.6 **H.** 4.5 or −4.5 **J.** 4 or −4 8. _____

9. To which set(s) of numbers does $\dfrac{7}{8}$ belong?

   **A.** rational **C.** irrational 9. _____

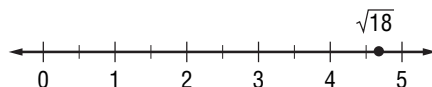   **B.** integer **D.** whole, integer, rational

10. Which graph shows the best estimate of $\sqrt{18}$?
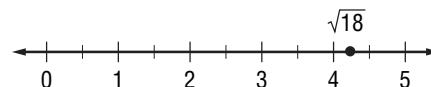
    **F.**

    

    **H.**

    

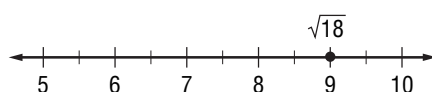    10. _____

    **G.**

    

    **J.**

    

11. Which sentence is true?

    **A.** $\sqrt{15} < 3\dfrac{1}{2}$ **B.** $-4.\overline{3} > -\sqrt{17}$ **C.** $\sqrt{20} = 10$ **D.** $\sqrt{14.4} < 4$ 11. _____

Assessment

**3** **Chapter 3 Test, Form 1** *(continued)*

**12.** Which set of numbers is ordered from least to greatest?

**F.** $-\sqrt{16}, -\sqrt{17}, -\sqrt{18}, -9$      **H.** $\sqrt{5}, -\sqrt{6}, 2\frac{1}{2}, -3$

**G.** $2.\overline{82}, \sqrt{8}, \sqrt{11}, 3\frac{1}{2}$      **J.** $\sqrt{10}, 4, \sqrt{4}, 1.5$      12. _____

**For Questions 13–15, find the length of the missing side of each right triangle. Round to the nearest tenth if necessary.**
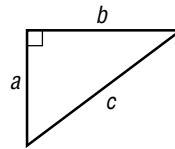
**13.** $a = 9$ feet, $b = 12$ feet

     **A.** 7.9 ft      **C.** 4.6 ft

     **B.** 1.7 ft      **D.** 15 ft      13. _____

**14.** $a = 2$ centimeters, $c = 5$ centimeters

     **F.** 1.7 cm      **G.** 5.4 cm      **H.** 4.6 cm      **J.** 2.6 cm      14. _____

**15.** $a = 3$ inches, $b = 6$ inches

     **A.** 3 in.      **B.** 4.2 in.      **C.** 6.7 in.      **D.** 5.2 in.      15. _____

**16. REAL ESTATE** José's yard is 30 meters by 40 meters. What is the distance from one corner to the opposite corner?

     **F.** 8.4 m      **G.** 70 m      **H.** 50 m      **J.** 26.5 m      16. _____

**17. EXERCISE** Sandy walked 2 miles south and then walked 4 miles east. How far was Sandy from her starting point? Round to the nearest tenth.

     **A.** 4.5 mi      **B.** 3.5 mi      **C.** 6.0 mi      **D.** 3.0 mi      17. _____

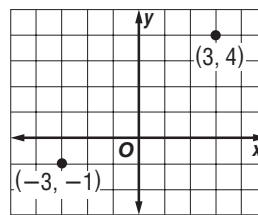**Find the distance between each pair of points whose coordinates are given. Round to the nearest tenth if necessary.**

**18.** the points in the graph at the right

     **F.** 7 units      **H.** 1 unit

     **G.** 7.8 units      **J.** 3.3 units      18. _____

**19.** $(2, 5), (5, 1)$

     **A.** 8.1 units      **C.** 2.7 units

     **B.** 25 units      **D.** 5 units      19. _____

**20.** $(-3, 4), (-2, -1)$

     **F.** 6.4 units      **G.** 25 units      **H.** 2.6 units      **J.** 5.1 units      20. _____

**Bonus SWIMMING** Marina is swimming in a rectangular pool that is 36 feet wide and 48 feet long. How much farther will she swim if she swims diagonally across the pool than if she swims the length of the pool?      **B:** _____