NAME _____ DATE _____ PERIOD ____

3 Chapter 3 Test, Form 2B

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. $\sqrt{100}$

   A. 10 **B.** 100 **C.** 1,000 **D.** −1,000 **1.** ____

2. $-\sqrt{1.69}$

   F. −1.3 **G.** 1.3 **H.** 1.69 **J.** −1.69 **2.** ____

3. $\sqrt{\frac{64}{121}}$

   A. 0.5 **B.** $\frac{11}{8}$ **C.** $\frac{8}{11}$ **D.** 0.5 **3.** ____

4. Solve $d^2 = 625$.

   F. 11 **G.** 15 or −15 **H.** −25 **J.** 25 or −25 **4.** ____

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

5. $\sqrt{104}$

   A. 11 **B.** 10 **C.** 12 **D.** 9 **5.** ____

6. $\sqrt{244}$

   F. 16 **G.** 17 **H.** 15 **J.** 18 **6.** ____

7. **SPORTS** A survey of 18 students showed that 7 liked football, 10 liked basketball, and 5 liked both. How many students liked neither football nor basketball?

   A. 10 **B.** 6 **C.** 5 **D.** 2 **7.** ____

8. **ALGEBRA** Estimate the solution of $f^2 = 90$ to the nearest integer.

   F. 45 **G.** 45 or −45 **H.** 9 **J.** 9 or −9 **8.** ____

9. To which set(s) of numbers does $\sqrt{5}$ belong?

   A. rational **C.** irrational

   B. integer, rational **D.** whole, integer, rational **9.** ____

10. To which set(s) of numbers does $-\frac{1}{7}$ belong?

    F. rational **H.** irrational

    G. integer, rational **J.** whole, integer, rational **10.** ____

11. Which is a true statement?

    A. $\sqrt{35} > 6.\overline{4}$ **B.** $\sqrt{18} = 9$ **C.** $2\frac{3}{4} < \sqrt{6}$ **D.** $-4\frac{1}{4} > -\sqrt{20}$ **11.** ____

Assessment

NAME _____ DATE _____ PERIOD ____

3 Chapter 3 Test, Form 2B *(continued)*

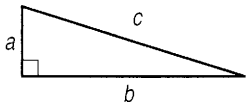
12. Which set of numbers is ordered from least to greatest?

F. $-8\frac{2}{5}, -8\frac{1}{2}, -\sqrt{69}, -\sqrt{75}$ **G.** $\sqrt{24}, \sqrt{27}, 5\frac{1}{4}, 5\frac{1}{3}$

H. $2\frac{1}{6}, 2.\overline{1}, \sqrt{3}, \sqrt{5}$ **J.** $\frac{1}{9}, \frac{1}{7}, \sqrt{2}, \sqrt{0.5}$ **12.** ____

For Questions 13 and 14, find the length of the missing side of each triangle. Round to the nearest tenth if necessary.

13. a = 5 inches, c = 17 inches



A. 4.7 in. **C.** 17.7 in.

B. 3.5 in. **D.** 16.2 in. **13.** ____

14. a = 4 millimeters, b = 6 millimeters

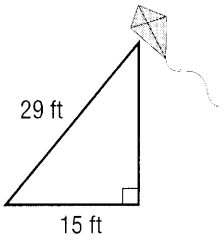
F. 10 mm **G.** 7.2 mm **H.** 4.5 mm **J.** 3.2 mm **14.** ____

15. Which triangle with sides of the given lengths is a right triangle?

A. 50 cm, 120 cm, 130 cm **C.** 24 ft, 30 ft, 20 ft

B. 15 in., 39 in., 35 in. **D.** 1.3 m, 0.5 m, 1.5 m **15.** ____

16. **KITING** How high above the ground is the kite? Round your answer to the nearest tenth.



F. 32.6 ft **H.** 24.8 ft

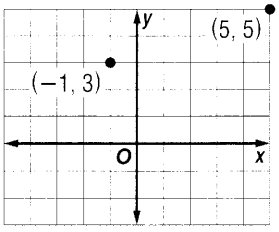
G. 3.7 ft **J.** 6.6 ft **16.** ____

17. **EXERCISE** Darren hiked 12 miles east and then 16 miles south. How far was Darren from his starting point?

A. 38 mi **B.** 20 mi **C.** 400 mi **D.** 21 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. 2.0 units **H.** 8.0 units

G. 6.3 units **J.** 6.0 units **18.** ____

19. (–2, –2), (–7, –5)

A. 8.6 units **C.** 5.8 units

B. 4 units **D.** 6.4 units **19.** ____

20. (3, 1), (8, 6)

F. 7.1 units **G.** 8.0 units **H.** 8.6 units **J.** 13.0 units **20.** ____

Bonus Graph the points $A(2, 2)$, $B(14, 2)$, and $C(8, 10)$. Connect the points to form a triangle and then find the perimeter. **B:** _____

_____