Name _____ Date _____

Practice A
For use with pages 109–118

Write the number as a power.

1. 36

2. 100

3. 9

Evaluate the expression.

4. $\sqrt{49}$

5. $-\sqrt{4}$

6. $-\sqrt{25}$

7. $\sqrt{81}$

8. $-\sqrt{121}$

9. $\pm\sqrt{16}$

Write the greatest perfect square less than the number and the least perfect square greater than the number.

10. 13

11. 28

12. 45

Approximate the square root to the nearest integer.

13. $\sqrt{5}$

14. $\sqrt{19}$

15. $-\sqrt{28}$

16. $-\sqrt{53}$

17. $-\sqrt{11}$

18. $\sqrt{70}$

Tell whether each number in the list is a real number, a rational number, an irrational number, an integer, or a whole number. Then order the numbers from least to greatest.

19. $\sqrt{64}, -5, \sqrt{9}, 2$

20. $\sqrt{3}, 5.5, -\sqrt{16}, 0$

21. $\frac{2}{3}, \sqrt{4}, -3.6, -\sqrt{1}$

22. $-\sqrt{6}, \frac{5}{2}, 7, -4$

23. Area Rug You are considering buying a square area rug that has an area of 25 square feet. Find the side length of the area rug.

24. Road Sign The U.S. Department of Transportation determines the sizes of the traffic control signs that you see along the roadways. The square Alabama state route sign at the right has an area of 576 square inches. Find the side length of the sign.

25. Sailboat You can determine the top speed (in knots) of a sailboat using the expression $1.34\sqrt{\ell}$, where ℓ is the boat's length (in feet) where it meets the water. Find the top speed of a sailboat with a length of 10 feet at the water. Round your answer to the nearest tenth.