Lesson 1.4 Squares and Square Roots

Find the square of each number.

Find the square root of each number.

Solve.

13. List the perfect squares between 100 and 500 that are even numbers.

14. Find the square root of $2 \times 2 \times 5 \times 7 \times 7 \times 5$.

15. The area of a square is 144 square inches. Find the perimeter of the square.

Find the value of each of the following.

16. 23²_____

- **17.** 40²_____
- **18.** $\sqrt{441}$
- **19.** $\sqrt{625}$
- **20.** $11^2 + \sqrt{81}$
- **21.** $6^2 \times \sqrt{100}$

Solve.

- **22.** Given that $17^2 = 289$, find the square of 170.
- **23.** Given that $290^2 = 84,100$, find the square of 29.
- **24.** Given that $\sqrt{961} = 31$, evaluate $\sqrt{96,100}$.
- **25.** Given that $\sqrt{562,500} = 750$, evaluate $\sqrt{5,625}$.
- **26.** A rectangular game board measures 126 centimeters by 90 centimeters. The game board is divided into small squares of equal size.
 - a) Find the longest possible length of the side of one of the small squares. (Hint: Use prime factorization.)

b) Find the least number of squares the game board can be equally divided into.

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