Name: _____   Date: _____

Learning Goal 7.1	I can identify perfect squares and cubes and evaluate square and cube roots.

What is a **square?**

A Square Number, or Perfect Square

What is a **prime factorization?**

Example

a. Determine the prime factorization of the following numbers:

      24   36   81

b. Which of these are perfect squares? Explain.   c. For each perfect square, draw the square and label the sides.

Example Determine the area of a square picture with side lengths of 14 cm.

A Square Root

Example Use prime factorization to determine $\sqrt{324}$.

Example Determine the square roots of the following values.

  a.   1   b.   4   c.   49   d.   81

Example Edgar knows that the square case for his computer game has an area of 144 cm^2. What is the side length of the case?