Name: _____   Date: _____

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

Warm Up Determine which of the following numbers are perfect squares by using their prime factorization. Explain.

    a.   196

    b.   220

        Estimating a Square Root

Example Estimate the following to **one decimal place.**

    a. $\sqrt{10}$ b. $\sqrt{62}$

    c. $\sqrt{39}$ d. $\sqrt{110}$

Assignment   p. 99 #4 – 10, 13, 15 – 17   Quiz Next Day!

Example Felicity wants to know if a wading pool will fit in a small space in her yard. She must estimate the side length of the square wading pool, which has an area of 7 m^2.

   a. What is a reasonable estimate for the side length of the pool? Use perfect squares to estimate. Give you answer to one decimal place.

   b. Use a calculator to approximate the side length of the pool, to the nearest tenth of a metre. Compare your estimate in part a. with the calculator's approximate answer.

Example How many whole numbers are there who have a square root between 2 and 3. List them.

Example How many whole numbers are there who have a square root between 6 and 7. List them.