

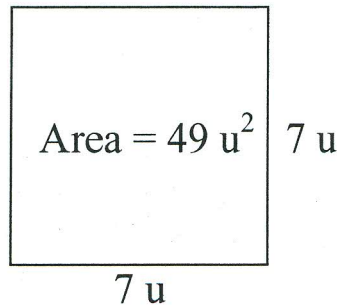
3.2 Perfect Squares, Perfect Cubes and their Roots

Perfect Squares

The square root of a number n , denoted \sqrt{n} , is a positive number whose square is n .

$$\sqrt{49} = \sqrt{7 \times 7} = 7$$

It is convenient to think of square root as the side Length of a square whose area is 49 units squared.



List of perfect squares we should be familiar with:

What would be quick way to find the $\sqrt{676}$ (without the use of technology)?

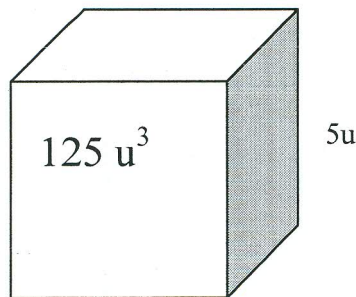
$$\sqrt{676} =$$

Perfect Cubes

The cube root of a number n , denoted $\sqrt[3]{n}$, is a positive number whose cube is n .

$$\sqrt[3]{125} = \sqrt{5 \times 5 \times 5} = 5$$

It is convenient to think of cube root as the side length of a cube whose volume is 125 units cubed.



List of perfect cubes we should be familiar with: