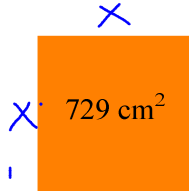


**2.1 Radicals**



$x^2 = 729$

$\sqrt{729}$

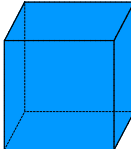
$x = 27$

$27 \times 4 = 108 \text{ cm}$

Work on the following with your partner:

Determine the perimeter of the square if it has an area of  $729 \text{ cm}^2$ .

If we had a cube that had a volume of  $1331 \text{ cm}^3$ , what would be the length of one side of the cube?



$\sqrt[3]{1331}$

11 cm

Feb 17-7:08 AM

We need to use square roots to solve problems.

**Square root:** A number is a square root of "x" if  $r^2 = x$

$\sqrt{25} = +5$  and  $-5$  because  $5^2 = 25$  and  $(-5)^2 = 25$

It is impossible to obtain the square root of a negative number because any number squared is always positive.

~~$\sqrt{-36}$~~

Feb 17-7:13 AM

Determine  $\sqrt{11}$  and write out ALL of its decimals

$$3.31662479$$

a) Round the above answer to 1, 2 and 3 decimal places.

$$\begin{array}{l} 3.3 \\ 3.32 \\ 3.317 \end{array}$$

b) Truncate to 1, 2 and 3 decimal places

$$\begin{array}{l} 3.3 \quad 3.316 \\ 3.31 \end{array}$$

Feb 17-7:18 AM

Determine the following roots

a)  $\sqrt[3]{27}$

b)  $\sqrt[4]{16}$

c)  $\sqrt[5]{125}$

$$3$$

$$2$$

$$2.627$$

Insert two numbers between 25 and 100 so that the four numbers form a geometric sequence.

a) List the 4 terms in EXACT form \*No decimals  
know answer.

$$\begin{array}{l} 25 \quad \dots \quad 100 \\ 25 \cdot (r)^3 = 100 \\ \frac{25 \cdot (r)^3}{25} = \frac{100}{25} \\ r^3 = 4 \\ r = \sqrt[3]{4} \end{array} \quad \begin{array}{l} 25 \cdot \sqrt[3]{4} \\ 25 \sqrt[3]{4} \\ (25 \sqrt[3]{4}) \cdot (\sqrt[3]{4}) \\ 25 (\sqrt[3]{4})^2 \end{array}$$

b) List the 4 terms to 2 decimal places

Feb 17-7:20 AM

**Assignment: Pg.72  
3, 9, 13, 14, 22, 24**

Feb 17-7:25 AM