

Chapter 6



Squares & Square Roots

Estimating square roots:

The square root of a number can be estimated in many ways. One of which is discussed here.

We know that $100 < 148 < 225$.

$$\sqrt{100} = 10 \text{ and } \sqrt{225} = 15.$$

But still we are not close to the square number.

We know that $12^2 = 144$ and $13^2 = 169$.

Therefore, $12 < \sqrt{148} < 13$ and 144 is much closer to 148 than 169.

So, $\sqrt{148}$ is approximately equal to 12.

