

Squares and Square Roots Ex 3.8 Q2

Answer:

	3.46508
3	12.0068
3	9
64	300
4	256
686	4468
6	4116
6925	35200
5	34625
693008	5750000
8	5544064
9	205936

∴ $\sqrt{12.0068} = 3.46508$

We can round it off to four decimal places, i.e. 3.4651.

Squares and Square Roots Ex 3.8 Q3

Answer:

Using the long division method:

3.31662	
3	11
3	9
63	200
3	189
661	1100
1	661
6626	43900
6	39756
66326	414400
6	397956
663322	1644400
2	1326644
1000	317756

$$1.0 \cdot \sqrt{11} = 3.31662$$

Squares and Square Roots Ex 3.8 Q4

Answer:

Given:
$$\sqrt{7}=2.646$$
 (i) $\sqrt{\frac{144}{7}}=\frac{\sqrt{144}}{\sqrt{7}}=\frac{12}{2.646}=4.536$

Given:
$$\sqrt{3} = 1.732$$
 (ii) $\sqrt{\frac{2500}{3}} = \frac{\sqrt{2500}}{\sqrt{3}} = \frac{50}{1.732} = 28.867$

Squares and Square Roots Ex 3.8 Q5

Answer:

From the given values, we can simplify the expressions in the following manner:

(i)
$$\sqrt{\frac{196}{75}} = \frac{14}{5\sqrt{3}} = \frac{14}{5\times1.732} = 1.617$$

(ii)
$$\sqrt{\frac{400}{63}} = \frac{20}{3\sqrt{7}} = \frac{20}{3 \times 2.646} = 2.520$$

(iii)
$$\sqrt{\frac{150}{7}} = \frac{5\sqrt{2} \times \sqrt{3}}{\sqrt{7}} = \frac{5 \times 1.414 \times 1.732}{2.646} = 4.628$$

(iv) $\sqrt{\frac{256}{5}} = \frac{16}{\sqrt{5}} = \frac{16}{2.236} = 7.155$

$$\left(iv\right)\sqrt{\frac{256}{5}} = \frac{16}{\sqrt{5}} = \frac{16}{2.236} = 7.155$$

$$\left(\mathbf{v}\right)\sqrt{\frac{27}{50}} = \frac{3\sqrt{3}}{5\sqrt{2}} = \frac{3\times1.732}{5\times1.414} = 0.735$$

******* END *******