

EXERCISE 3.9

PAGE NO: 3.61

Using square root table, find the square roots of the following:

1. 7

Solution:

From square root table we know,

Square root of 7 is:

$$\sqrt{7} = 2.645$$

∴ The square root of 7 is 2.645

2. 15

Solution:

From square root table we know,

Square root of 15 is:

$$\sqrt{15} = 3.8729$$

∴ The square root of 15 is 3.873

3. 74

Solution:

From square root table we know,

Square root of 74 is:

$$\sqrt{74} = 8.6023$$

∴ The square root of 74 is 8.602

4. 82

Solution:

From square root table we know,

Square root of 82 is:

$$\sqrt{82} = 9.0553$$

∴ The square root of 82 is 9.055

5. 198

Solution:

From square root table we know,

Square root of 198 is:

$$\sqrt{198} = 14.0712$$

∴ The square root of 198 is 14.071

6. 540

Solution:

From square root table we know,

Square root of 540 is:

$$\sqrt{540} = 23.2379$$

∴ The square root of 540 is 23.24

7. 8700**Solution:**

From square root table we know,

Square root of 8700 is:

$$\sqrt{8700} = 93.2737$$

∴ The square root of 8700 is 93.27

8. 3509**Solution:**

From square root table we know,

Square root of 3509 is:

$$\sqrt{3509} = 59.2368$$

∴ The square root of 3509 is 59.235

9. 6929**Solution:**

From square root table we know,

Square root of 6929 is:

$$\sqrt{6929} = 83.2406$$

∴ The square root of 6929 is 83.239

10. 25725**Solution:**

From square root table we know,

Square root of 25725 is:

$$\sqrt{25725} = 160.3901$$

∴ The square root of 25725 is 160.41

11. 1312.**Solution:**

From square root table we know,

Square root of 1312 is:

$$\sqrt{1312} = 36.2215$$

∴ The square root of 1312 is 36.22

12. 4192**Solution:**

From square root table we know,

Square root of 4192 is:

$$\sqrt{4192} = 64.7456$$

∴ The square root of 4192 is 64.75

13. 4955**Solution:**

From square root table we know,

Square root of 4955 is:

$$\sqrt{4955} = 70.3917$$

∴ The square root of 4955 is 70.39

14. 99/144**Solution:**

From square root table we know,

Square root of 99/144 is:

$$\sqrt{(99/144)} = 0.82915$$

∴ The square root of 99/144 is 0.829

15. 57/169**Solution:**

From square root table we know,

Square root of 57/169 is:

$$\sqrt{(57/169)} = 0.58207$$

∴ The square root of 57/169 is 0.581

16. 101/169**Solution:**

From square root table we know,

Square root of 101/169 is:

$$\sqrt{(101/169)} = 0.77306$$

∴ The square root of 57/169 is 0.773

17. 13.21**Solution:**

From square root table we know,

Square root of 13.21 is:

$$\sqrt{13.21} = 3.6345$$

∴ The square root of 13.21 is 3.635

18. 21.97**Solution:**

From square root table we know,

Square root of 21.97 is:

$$\sqrt{21.97} = 4.6872$$

∴ The square root of 21.97 is 4.6872

19. 110**Solution:**

From square root table we know,

Square root of 110 is:

$$\sqrt{110} = 10.4880$$

∴ The square root of 110 is 10.488

20. 1110**Solution:**

From square root table we know,

Square root of 1110 is:

$$\sqrt{1110} = 33.3166$$

∴ The square root of 1110 is 33.317

21. 11.11**Solution:**

From square root table we know,

Square root of 11.11 is:

$$\sqrt{11.11} = 3.33316$$

∴ The square root of 11.11 is 3.333

22. The area of a square field is 325m^2 . Find the approximate length of one side of the field.

Solution:

We know that the given area of the field = 325 m^2

To find the approximate length of the side of the field we will have to calculate the square root of 325

$$\sqrt{325} = 18.027 \text{ m}$$

∴ The approximate length of one side of the field is 18.027 m

23. Find the length of a side of a square, whose area is equal to the area of a rectangle with sides 240 m and 70 m.

Solution:

We know that from the question,

Area of square = Area of rectangle

$$\text{Side}^2 = 240 \times 70$$

$$\text{Side} = \sqrt{(240 \times 70)}$$

$$= \sqrt{(10 \times 10 \times 2 \times 2 \times 2 \times 3 \times 7)}$$

$$= 20\sqrt{(42)}$$

$$= 20 \times 6.48$$

$$= 129.60 \text{ m}$$

∴ The length of side of the square is 129.60 m

