

Square and Cube Roots

Practice worksheet · KS3 · Years 7 to 9

Name: _____

Date: _____

A root asks: what number, times itself (twice for a square root, three times for a cube root), gives this total? If it isn't exact, trap it between two you know.

1. The square root of 9
9. The cube root of 64, minus the square root of 9

2. The square root of 16
10. The square root of 36, times the cube root of 8

3. The square root of 81
11. Between which two whole numbers does the square root of 20 lie?

4. The square root of 100
12. Between which two whole numbers does the square root of 90 lie?

5. The cube root of 8
13. Which is bigger: the square root of 50, or 7? Write the bigger one.

6. The cube root of 27
14. A square garden has an area of 64 square metres. What is the length of each side, in metres?

stretch

7. The cube root of 125
15. A cube-shaped storage box has a volume of 27 cubic centimetres. What is the length of each edge, in centimetres?

stretch

8. The square root of 49, plus the square root of 16

Answers

Square and cube roots · mark it together

1. $3 \times 3 = 9 = 3$

2. $4 \times 4 = 16 = 4$

3. $9 \times 9 = 81 = 9$

4. $10 \times 10 = 100 = 10$

5. $2 \times 2 \times 2 = 8 = 2$

6. $3 \times 3 \times 3 = 27 = 3$

7. $5 \times 5 \times 5 = 125 = 5$

8. $7 + 4 = 11$

9. $4 - 3 = 1$

10. $6 \times 2 = 12$

11. $4 \times 4 = 16$, $5 \times 5 = 25 =$ between 4 and 5

12. $9 \times 9 = 81$, $10 \times 10 = 100 =$ between 9 and 10

13. $7 \times 7 = 49$, and 50 is bigger than 49 = the square root of 50

14. $8 \times 8 = 64 = 8$

15. $3 \times 3 \times 3 = 27 = 3$