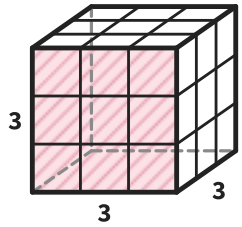
Cubes and cube roots

1

Work out 3^3



the same number, three times, multiplied

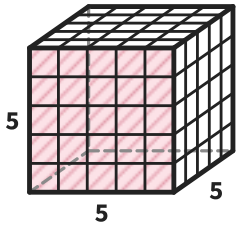
$3 \times 3 = 9$ front layer

$\square \times \square = \square$ layers

Answer _____

2

Work out 5^3



the same number, three times, multiplied

$\square \times \square = \square$ front layer

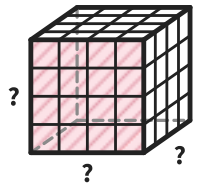
$\square \times \square = \square$ layers

Answer _____

3

Work out $\sqrt[3]{64}$

64 small cubes



which number, three times, makes 64?

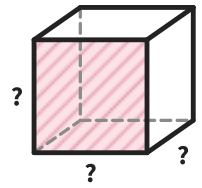
$\square \times \square \times \square = 64$

Answer _____

4

Work out $\sqrt[3]{1000}$

1000 small cubes



which number, three times, makes 1000?

$\square \times \square \times \square = 1000$

Answer _____

5

Work out $(-3)^3$

$(-3) \times (-3) \times (-3)$

Answer _____

6

Work out 0.4^3

$0.4 \times 0.4 \times 0.4$

Answer _____

7

Work out $\sqrt[3]{-125}$

$? \times ? \times ? = -125$

Answer _____

8

Ravi says $6^3 = 18$. Explain Ravi's mistake. Then work out 6^3.

Answer _____

Cubes and cube roots *further practice*

9

Work out $(-4)^3$

Answer _____

10

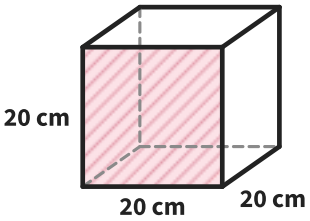
Circle the cube numbers.

4	8	16	25
27	50	81	1000

Answer _____

11

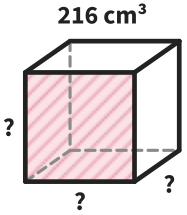
A plant pot is a cube with edges of 20 cm.
How much soil fills it? Give the units.



Answer _____

12

This cube has a volume of 216 cm^3.
How long is each edge?



Answer _____

13

Which is bigger, $\sqrt[3]{27}$ or $\sqrt{16}$?
Show how you know.

Answer _____

14

Work out $3^3 - 4^2$

Answer _____

15

Nina has 30 small cubes. She builds the biggest solid cube she can.
How many small cubes are left over?

Answer _____

16

Leo says, "When you cube a number, the answer is always bigger than the number." Is Leo right? Explain.

Answer _____