

Workout

Question 1: Write each of the following as multiplications
e.g. $4^3 = 4 \times 4 \times 4$

- (a) 5^3 (b) 2^3 (c) 9^3 (d) 10^3 (e) 7^3 (f) 0.2^3 (g) 15^3

Question 2: Write each of the following using the “cubed” symbol
e.g. $8 \times 8 \times 8 = 8^3$

- (a) $4 \times 4 \times 4$ (b) $1 \times 1 \times 1$ (c) $6 \times 6 \times 6$ (d) $11 \times 11 \times 11$
(e) $0.5 \times 0.5 \times 0.5$ (f) $27 \times 27 \times 27$ (g) $500 \times 500 \times 500$

Question 3: Work out each of the following
You may not use a calculator

- (a) 2^3 (b) 1^3 (c) 5^3 (d) 6^3 (e) 9^3 (f) 10^3 (g) 20^3
(h) 4^3 (i) 8^3 (j) 3^3 (k) 50^3 (l) 15^3 (m) 12^3 (n) 21^3

Question 4: Write down the first 10 cube numbers

Question 5: Work out each of the following.
You may use a calculator

- (a) 53^3 (b) 39^3 (c) 108^3 (d) 99^3 (e) 3.5^3 (f) 7.2^3 (g) 6.8^3
(h) 0.7^3 (i) 12.6^3 (j) 0.45^3 (k) 8.11^3 (l) 600^3 (m) 1000^3 (n) 1111^3

Apply

Question 1: James says the sum of the first two cube numbers is a square number.

- (a) Is he correct?
(b) What about the first three cube numbers?
(c) What about the first four cube numbers?

Cubing a Number

Videos 212 and 213 on www.corbettmaths.com

Question 2: Tom says “if you cube a number the answer is always bigger.”
Show Tom is incorrect using two different examples.

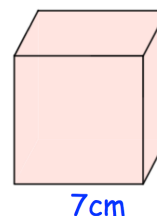


Question 3: Work out the following

(a) $(-2)^3$ (b) $(-1)^3$ (c) $(-10)^3$ (d) $(-5)^3$

Question 4: Rebecca says “when you add three consecutive cube numbers, the answer is always odd.”
Is Rebecca right? Explain your answer.

Question 5: Work out the volume of this cube.



Question 6: Find three numbers that are square numbers **and** cube numbers