

Find the cube root of each of the following numbers:

1. 8×64

2. $(-216) \times 1728$

3. $27 \times (-2744)$

4. $(-125) \times (-3375)$

5. -456533

6. -5832000



Three numbers are in the ratio 2 : 3 : 5 to one another.
The sum of their cubes is 54880. The numbers are_____.

A)

☐ 14, 21, 35

B)

☐ 12, 15, 17

C)

☐ 14, 18, 21

D)

☐ 21, 28, 32



Atul made a cuboid of plasticine. Length, breadth and height of the cuboid are 25 cm. 25 cm and 50 cm. How many minimum such cuboids he needs to make a perfect cube?

A)



4

B)



20

C)



12

D)



25



A rectangular cubical piece of metal of dimensions $2\text{ cm} \times 3\text{ cm} \times 4\text{ cm}$ is melted. Some more of the metal is added and it is made into a cube. The cube has integral measures for its sides. What is the minimum amount of metal that is added and what is the side of this cube?

CUBES AND CUBE ROOTS**CASE STUDY**

Smart watches are a big innovation in the wearable industry, performing too many functions. The most common now a days is to count the number of steps. This has a big impact on health.



Gunjan noticed the number of steps she walked on her smart watch in the evening and found it to be '23,328'.

Based on the above information, answer the following questions:

- (i) Is the given number a perfect cube? 1
- (ii) If not, then what is the smallest number to be multiplied to make it a perfect cube? 2

OR

- What is the cube-root of the resulting number? 2
- (iii) Find the one's digit in the cube of the number 9999. 1