



ST. LAWRENCE HIGH SCHOOL

A Jesuit Christian Minority Institution



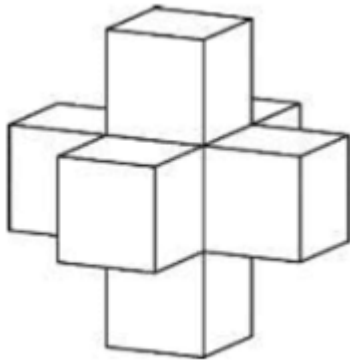
Sub: Arithmetic
Duration: 40 Min

Class: 7
Worksheet Solution 47
Cube and Cuboid

Date: 02.07.20
Full Marks: 15

Choose the correct options:

- The capacity of a rectangular tank is 189 kiloliters. it is 7 m long and 4.5 m high. Find its breadth.
(a) **6 m**
(b) 10 m
(c) 4 m
(d) 5.2 m
- A swimming pool has 120 kiloliters of water. If the width of the pool is 4 m and the depth of water is 2 m, what is the length of the pool?
(a) 14 m
(b) **15 m**
(c) 10 m
(d) 20 m
- Find the volume of a cube of side 8 cm.
(a) 343 cm^3
(b) **512 cm^3**
(c) 144 cm^3
(d) 729 cm^3
- Find the surface area of a cube with sides 4 mm
(a) 72 mm^2
(b) **96 mm^2**
(c) 108 mm^2
(d) 64 mm^2
- Find the surface area of a cuboid 4 cm in height, 2 cm length and 5 cm in width.
(a) 40 cm^2
(b) 46 cm^2
(c) 58 cm^2
(d) **76 cm^2**
- Find the surface area of a cuboid with length = l, width = w and height = h
(a) **$2hl + 2wl + 2hw$**
(b) $l \cdot h \cdot w$
(c) $6hl$
(d) $4hw$
- A cube has each of its faces covered by one face of an identical cube, making the solid shape shown. The volume of the solid shape is 875 cm^3 . What is the volume of one of the cubes?



- (a) **125 cm^3**
(b) 250 cm^3
(c) 875 cm^3
(d) 62.25 cm^3

8. A cube has six faces. Theo builds a bigger cube out of 27 little cubes. He paints the outside of the big cube and lets the paint dry. He then breaks it up into the original 27 cubes. What if the total number of unpainted faces on the little cubes?
- 162 faces
 - 108 faces**
 - 81 faces
 - 54 faces
9. Two identical cubes each of total surface area of 6 cm^2 are joined end to end. Which of the following is the total surface area of the cuboid so formed?
- 12 cm^2
 - 18 cm^2
 - 10 cm^2**
 - 8 cm^2
10. If a rectangular cuboid is 15cm long, 10cm wide and 9cm high with volume of 500 cm^3 then surface area of cuboid is
- 750 cm^2**
 - 800 cm^2
 - 850 cm^2
 - 700 cm^2
11. If a rectangular cuboid is 9 cm long and 8 cm wide with volume of 450 cm^3 then height of cuboid in 'cm' is
- 12.25
 - 6.25**
 - 8.25
 - 9.25
12. If a rectangular tank is 21 cm long, 13 cm wide and 18 cm high and contains water up to a height of 11 cm then total surface area is
- 1450 cm^2
 - 1350 cm^2
 - 1200 cm^2
 - 1021 cm^2**
13. By converting $2,500,000 \text{ mm}^3$ into cm^3 , answer will be
- 250 cm^3
 - $2,500 \text{ cm}^3$**
 - 25 cm^3
 - $25,000 \text{ cm}^3$
14. A cube is coloured red on all faces. It is cut into 64 smaller cubes of equal size. How many cubes have no face coloured?
- 24
 - 16
 - 8**
 - 4
15. A big cube whose all the corners are named as H, I, J, K, L, M, N and O. Its each portion is of 42 cm length. The cube is segmented into tiny cubes and length of the portion of each tiny cube is 6 cm. Then how many such cubes are possible?
- 343
 - 385
 - 125**
 - 364