



Date: 20th May, 2020 Sainik Coaching

Maths H.W

Read the concept & content given here learn the formulas.

Solve Q 1 to 5.

VOLUMES

REMEMBER

- (i) Volume of sphere = $\frac{4}{3} \pi r^3$, where r is the radius of the sphere.
- (ii) Volume of a cube = $(l)^3$, where l is the edge of the cube.
- (iii) Volume of cone = $\frac{1}{3} \pi r^2 h$, where r is the radius of the base and h height.
- (iv) Volume of a cylinder = $\pi r^2 h$ where r is the radius of the base and h is the height of cylinder.
- (v) Volume of a cuboid (rectangular solid) = $l \times b \times h$, where l , b and h denote length, breadth and height respectively.
- (vi) Surface of the sphere = $4 \pi r^2$
- (vii) Surface of cylinder = $2 \pi r h$
- (viii) Surface of a cuboid = $2 (l.b + b.h + l.h)$
- (ix) Area of the slant side of cone = $\pi r l$, where l is the side and is equal to $\sqrt{r^2 + h^2}$

SOLVED EXAMPLE

1. A soap cake is 8 cm. long, 5 cm. broad and 2.5 cm. high. How many such soap cakes can be placed inside a cardboard whose length, breadth and height are 56 cm., 35 cm. and 25 cm. respectively?

Solution:

Volume of one soap cake = $8 \times 5 \times \frac{5}{2} \text{ cm}^3$
 $= \frac{200}{2} = 100 \text{ cm}^3$

Volume of cardboard = $56 \times 35 \times 25 \text{ cm}^3$
Hence, the number of soap cakes in the cardboard
 $= \frac{56 \times 35 \times 25}{100} = 490 \text{ Ans.}$

2. A tank is 6 m. long, 5 m. wide and 4 m. high. How much water can it hold?

Solution:-

Length of tank = 6 cm.
Breadth of tank = 5 cm.
Height of tank = 4 cm.
 \therefore Volume of tank = $6 \times 5 \times 4 \text{ m}^3 = 120 \text{ cu. metres}$
Hence, quantity of water in tank = 120 cu. metres
Ans.

EXERCISE

- 1. How many cubes having 2 cm. edge will be required to make a cube having 4 cm. edge?
- 2. The area of the floor of a rectangular room is 10 sq. m. Its height is 4 metre. What is the volume of air in that room?
- 3. A soap cake is 7 cm. long, 5 cm. broad and 2.5 cm. high. How many soap cakes may be put in a card board 56 cm. long 40 cm. broad and 25 cm. high?
- 4. A solid (rectangular) 10 cm. long, 8 cm. wide and 6 cm. thick weigh 9 kg. Find the weight of another solid of the same metal whose length is 20 cm., width 4 cm. and thickness 3 cm.
- 5. From a log of wood being 3 metres long 1 metre broad and 50 cm. high. How many pieces of 25 cm. long, 20 cm. broad and 10 cm. high can be cut?

Subject: Hindi

विलोम शब्द

81. आवृत - अनावृत
82. आकर्ष - विकर्ष
83. आद्र - शुष्क
84. आच्छादित - अनाच्छादित
85. आहार - अनाहार
86. आशा - निराशा
87. आधुनिक - प्राचीन
88. आशीर्वाद - अभिशाप
89. आसक्त - अनासक्त
90. आगमन - गमन
91. आध्यात्मिक - भौतिक
92. आस्था - अनास्था
93. इच्छा - अनिच्छा
94. इहलोक - परलोक
95. ईश्वर - अनीश्वर
96. ईर्ष्या - प्रेम
97. उत्कर्ष - अपकर्ष
98. उषा - संध्या
99. उग्र - सौम्य
100. उदार - अनुदार
101. उपकार - अपकार
102. उन्नति - अवनति
103. उपयुक्त - अनुपयुक्त
104. उपाय - निरुपाय
105. एकांगी - सर्वांगीण
106. ओखली - मूसल
107. ओछा - गंभीर
108. ओज - ओजहीन
109. ओजस्विता - ओजहीनता
110. ओजस्वी - ओजहीन
111. ओट - प्रकट
112. ओढ़ना - बिछाना
113. ओतप्रोत - विलग
114. औगत - सुगत
115. औद्योगिक - अनौद्योगिक
116. औपचारिक - औपचारिक
117. औपचारिकता - अनौपचारिकता
118. औघर - सुघर
119. औंधा - सीधा
120. औंधाना - सीधा करना



Subject: English

To read and understand this concept from any book.



3. PRESENT PERFECT TENSE

The present perfect tense indicates an action that started in the past and is still connected with the present in some way or the other. It shows an action that has been completed just now or some time back in the immediate past.

Sentence Type	Sentence Structure	Examples
Affirmative (Yes-statement)	S + has/have + V ³ + Obj.	I <i>have known</i> him for a long time.
Negative (No-statement)	S + has/have + not + V ³ + Obj.	I <i>haven't known</i> him for a long time.
Interrogative (Yes/No question)	Has/Have + S + V ³ + Obj.?	<i>Have I known</i> him for a long time?
Interrogative (Wh-questions)	Wh-word + has/have + S + V ³ + Obj.?	<i>Who have I known</i> for a long time? Or <i>How long have I known</i> him?

We use the present perfect tense :

- to indicate a finished action that has its impact (result) in the present
Example : Ankit has found his watch.
- to convey information or news
Example : The Prime Minister has signed the nuclear deal with America.
- for repeated action till the present
Example : I have listened to the song four times since this afternoon.
- to indicate an action that started in the past and is still continuing
Example : I have always admired you.