

MATHEMATICS

01. Mohit goes to school on his bicycle. He has to travel x Km in 25 minutes to reach the school exactly on time. He travels the first 2 Km in 15 minutes. At what speed should he travel for the rest of the distance so that he reaches the school exactly on time?

A. $\frac{x}{10}$

B. $\frac{x}{25}$

C. $\frac{x-2}{10}$

D. $\frac{x-2}{25}$

02. The figure, **not drawn to scale**, shows a triangle of height 4 cm cut from a shaded square of sides 5cm. The area, of the remaining shaded region of the square in cm^2 is

A. 5

B. 10

C. 15

D. 20

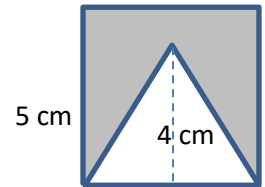
03. Two complementary angles which differ by 16° are

A. $53^\circ, 37^\circ$

B. $56^\circ, 46^\circ$

C. $62^\circ, 28^\circ$

D. $59^\circ, 31^\circ$



04. What is the sum of the interior angles of a polygon with 53 sides?

A. 9180

B. 9280

C. 9380

D. 9480

05. The Pythagorean triplets with the smallest number 10 is

A. 10, 5, 2

B. 10, 24, 26

C. 10, 20, 30

D. None of these.

06. The perimeter of a rectangle is 26 cm. The rectangle is converted to a square by tripling the width and taking a quarter of the length. The perimeter of the resulting square is

A. 9 cm

B. 12 cm

C. 20 cm

D. 26 cm

07. A swimming pool measures $25m \times 10m \times 3m$. The water is filled up to a depth of 2.5 metres. The quantity of water in the pool in litres is :

A. 652000 L

B. 62500 L

C. 625000 L

D. 6250 L

08. A number is such that it is as much greater than 65 as it is less than 91. The number is

A. 75

B. 78

C. 74

D. 77

09. The students of class IX of a school donated ₹ 2401 in all, for Prime Minister's National Relief Fund. Each student donated as many rupees as the number of students in the class. The number of students in the class is

A. 49

B. 59

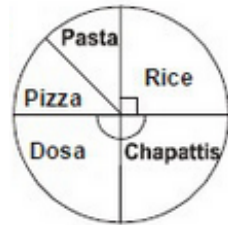
C. 69

D. 79

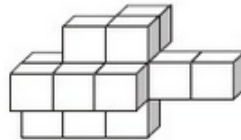
10. The hour hand of a circular clock is 10 cm long. The distance covered by it in 2 days or 48 hours is ($\pi = 3.14$)



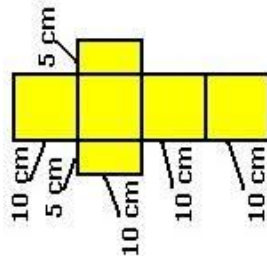
- A. 250.2 cm B. 251 cm C. 252.2 cm D. 251.2 cm
11. The given figure shows the food liking of 1080 students of a school. If the sectors of Dosa and Chapattis are equal, then total number of students who like Dosa and Chapattis is



- A. 1080 B. 540 C. 270 D. 518
12. The solid shown below is made up of cubes of edge 4 cm. The volume of solid is



- A. 832 cm^3 B. 842 cm^3 C. 960 cm^3 D. 896 cm^3
13. Consider the net shown. What does this net represent?



- A. A cube with a side 10 cm.
 B. A box with a length and width 10 cm, and a height 5 cm.
 C. A box with a length and width 5 cm, and a height 10 cm.

D. This net does not represent a box.

14. A yoga instructor wants to arrange maximum possible number of 6000 students in a ground so that the number of rows is same as the number of columns. How many rows will be there if 71 students were left out after the arrangement?

A. 80

B. 88

C. 77

D. 78

15. A six-sided die is rolled once. What is the probability that the number rolled is an even number greater than 2?

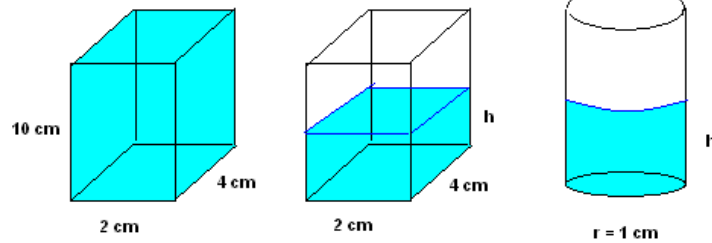
A. $\frac{2}{3}$

B. $\frac{1}{6}$

C. $\frac{1}{3}$

D. none of these.

16. Initially the rectangular prism on the left was full of water. Then water was poured in the right cylindrical container so that the volume of water in both containers are equal. Find the height h of water in both containers.(round your answer to the nearest tenth of a cm) (Use $\pi = \frac{22}{7}$)



A. 5, 13

B. 3, 12

C. 4, 13

D. 5, 14