

PERIMETER AND AREA

1) A square piece of ground is 65 meters long. The cost of fencing it around with 5 lines of wire at the rate of Rs.1.35 per metre is

- a) Rs.1755 b) Rs.1355 c) Rs.1300 d) Rs.250 Ans: a

2) A rectangular garden is 82 metres by 68 metres. Sita walks round it at the rate of 2.5 km per hour. Then time taken by Sita in making five rounds is

- a) 60 minutes b) 45 minutes c) 36 minutes d) 20 minutes Ans: c

3) ABCD is a Parallelogram whose area is 150 cm². The distance between AB and DC is 10 cm and distance between BC and AD is 15 cm. The perimeter of the parallelogram is

- 25 cm b) 50 cm c) 52 cm d) None of the above Ans: b

4) Perimeter of a square, whose side is a, is

- a) $2a^2$ b) $4a$ c) a^2 d) $4a^2$

Ans: b

5) Length of a diagonal of a rectangle whose sides are a and b is

- a) ab b) $a^2 + b^2$ c) $\sqrt{a^2 + b^2}$ d) None of the above

Ans: d

6) A rectangular park is 65 m long and 50 m wide. Two cross paths each 2 m wide are to be constructed parallel to the sides. If these paths pass through the centre of the rectangle and cost of construction is Rs.17.25 per sq. meter, the total cost of the construction of the path is

- a) Rs.400 b) Rs.3898 c) Rs.4000.50 d) Rs.3898.50

Ans: d

7) The area of a regular hexagon of side 2a is

- a) $3 \frac{\sqrt{3}a^2}{2}$ b) $6\sqrt{3}a^2$ c) $6a^2$ d) $3\sqrt{3}a^2$

Ans: b

8) ABC is a triangle and AD is one of its medians. If E is the mid-point of the median AD, then area of AEB is equal to

- a) $\frac{1}{4}$ Area of ΔABC
b) $\frac{1}{2}$ Area of ΔABC
c) $\frac{3}{4}$ Area of ΔABC
d) $\frac{2}{3}$ Area of ΔABC

Ans: a

9) The length of the diagonal of a square whose area is 24200 m^2 is

a) 110 m b) 242 m c) 220 m d) 200 m Ans:c

10) A lawn of 150 m long and 120m broad has a path 5 m wide inside running round it. The cost of covering the path with stone at 45 paise per square metre is

a) Rs.1100 b) Rs.1500 c) Rs.1170 d) Rs.500 Ans: c

11) The length and breadth of a room are in the ratio of 5: 3 . The cost of white washing the walls at the rate of 10 paise per sq m is Rs.16 . If height is 5m then the length and breadth are

a) 3m , 2m b) 10m, 6 m c) 15m, 6m d) 10m , 5 m

Ans: b

12) A room is 5.5 m long, 4 m broad and 4.5 m high. The cost of papering its walls and ceiling at 20p per sq. m is

a) Rs.20.00 b) Rs.10.50 c) Rs.21.50 d) None of the above

Ans:c

13) A room is 21 dm long, 14dm broad and 12 dm high. It has two doors each 8 dm x $4 \frac{1}{2}$ dm and 3 windows each 6dm x .5 dm. The cost of whitewashing the walls at 5 paise per sq. dm is

a) Rs.50 b) Rs.35 c) Rs.35.25 d) Rs.15

Ans:c

14) The cost of leveling a rectangular field at 25 p per sq m is Rs.300 . It sides are in the ratio 4:3 . The cost of fencing it at 18 paise per metre is

a) Rs.25.20 b) Rs.15.00 c) Rs.15.20 d) Rs.25.00 Ans:a

15) The least number of a equal square slabs that can be fitted in a verandah 10.5m long and 3 m wide is

a) 15 b) 14 c) 13 d) 12 Ans:b

16) The length of a room exceeds its breadth by 15dm and its perimeter is 150 dm . The cost of carpeting it at Rs.2.50/ sq m is

a)Rs.33.00 b) Rs.33.75 c) Rs.23.00 d) Rs.23.75

Ans:b

17) It costs Rs.156 to carpet a room 2.8m broad with carpet 56cm wide at 80 paise per metre. The length of the room is

a) 50m b) 30m c) 39m d) 29m

Ans:c

18) The cost of papering the walls of a hall at 35 paise per square metre is Rs.157.50. The height of the hall is 5m. The length and the breadth of the hall if they are in the ratio 3: 2 are

a) 15m, 10m b) 24m, 16m c) 27m, 18m d) 12m , 8 m

Ans:c

19) The internal length, breadth and height of an open box are 85cm, 65cm and 72.5 cm respectively. The cost of painting the outside of the box leaving its bottom at 60 paise per square decimeter , if the wood is 25mm thick, is

a) Rs.72 b) Rs.144 c) Rs.70 d) None of the above

Ans:b

20) The non-parallel sides of a trapezium are 11cm and 15cm and its parallel sides are 13cm and 25cm. The area of the trapezium is nearly

a) 209.76 sq.cm b) 103 sq.cm c) 220 sq. cm d) 125 sq.cm

Ans:a

21) The cost of decorating the walls and ceiling of a room 18dm long , 16dm broad and 14dm high with a paper 1dm 4cm wide at the rate of 4 paise per decimeter when a deduction of 85 sq dm is allowed for doors is

a) Rs.25 b) 30 30 c) 23 d) None of the above

Ans:d

22) There are as many square metres in the area of an equilateral triangle as there are metres in its perimeter. Its side is

a) 6.9m b) 6.93 m c) 3.9 m d) 3.92

Ans:b

23) The perimeter of a right-angled triangle measures 60cm and the hypotenuse measures 25cm. The other two sides are

a) 10cm, 15cm b) 20cm, 10cm c) 20cm, 15cm d) 10cm, 10cm

Ans:c

24) The lengths of the diagonals of the rhombus are 8cm and 6cm. Area of the rhombus is

a) 42 sq. cm b) 24sq cm c) 14 sq cm d) None of the above

Ans:b

25) The cross section of a canal is a trapezium. If the canal is 10m wide at the top, 6m wide at the bottom and the area of cross-section is 72 sq. m, its depth is

a) 5m b) 9 m c) 8m d) 4m

Ans:b

26) The parallel sides of a trapezium are 24cm and 52cm and the other sides are 26cm and 30cm. The area of the trapezium is

a) 900 sq.cm b) 800 sq.cm c) 1016 sq.cm d) 700 sq.cm

Ans:c

27) The perimeter of a regular hexagon of side a metres is

- a) 8a b) 6a c) 3a d) None of these
b) Ans:b

28) A room 5 m long and 4m wide is surrounded by a verandah. The width of the verandah, if it occupies 22 sq. metres, is

- a) 0.5 metre b) 1.0 metre c) 1.5 metre d) 2.0 metre

Ans:b

29) A table cover 3.5×1.5 m is spread on a table. The cost of the top of the table at Rs.2.50 per sq m if 25cm table cover is hanging all round the table is

- a) Rs.15.00 b) Rs.7.00 c) Rs.7.50 d) Rs.10.00

Ans:c

30) A road 3 m wide running all round a square garden has an area of 396 sq.metres. The area of the part of the garden enclosed by the road is

- a) 1000 sq.metres b) Rs.900 sq metres c) 400 sq.metres d) 700 sq.meters

Ans:b