

Heron's Formula

Question 1.

The perimeter of a rhombus is 20 cm. One of its diagonals is 8 cm. Then area of the rhombus is

- (a) 24 cm^2
- (b) 42 cm^2
- (c) 18 cm^2
- (d) 36 cm^2

Answer: (a) 24 cm^2

Question 2.

If the height of a parallelogram having 500 cm^2 as the area is 20 cm, then its base is of length

- (a) 25 cm
- (b) 15 cm
- (c) 20 cm
- (d) 50 cm

Answer: (a) 25 cm

Question 3.

The area of quadrilateral PQRS, in which $PQ = 7 \text{ cm}$, $QR = 6 \text{ cm}$, $RS = 12 \text{ cm}$, $PS = 15 \text{ cm}$ and $PR = 9 \text{ cm}$:

- (a) 74.98 cm^2
- (b) 25.25 cm^2
- (c) 75 cm^2
- (d) 68.25 cm^2

Answer: (a) 74.98 cm^2

Question 4.

The perimeter of a rhombus is 146 cm. One of its diagonals is 55 cm. The length of the other diagonal and area of the rhombus are

- (a) 48 cm, 2320 cm^2
- (b) 48 cm, 1820 cm^2
- (c) 88 cm, 1320 cm^2
- (d) 48 cm, 1320 cm^2

Answer: (d) 48 cm, 1320 cm^2

Question 5.

Length of perpendicular drawn on smallest side of scalene triangle is

- (a) Smallest
- (b) Largest
- (c) No relation
- (d) None

Answer: (c) No relation

Question 6.

The area of a right angled triangle if the radius of its circumcircle is 3 cm and altitude drawn to the hypotenuse is 2 cm.

- (a) 6 cm^2
- (b) 3 cm^2
- (c) 4 cm^2
- (d) 8 cm^2

Answer: (a) 6 cm^2

Question 7.

The edges of a triangular board are 6 cm, 8 cm and 10 cm. The cost of painting it at the rate of 70 paise per cm^2 is

- (a) ₹17
- (b) ₹16.80
- (c) ₹7
- (d) ₹16

Answer: (b) ₹16.80

Question 8.

The lengths of a triangle are 6 cm, 8 cm and 10 cm. Then the length of perpendicular from the opposite vertex to the side whose length is 8cm is:

- (a) 4 cm
- (b) 6 cm
- (c) 5 cm
- (d) 2 cm

Answer: (b) 6 cm

Question 9.

The area of an equilateral triangle having side length equal to $\frac{\sqrt{3}}{4}$ cm is:

- (a) $\frac{2}{27}$ sq.cm
- (b) $\frac{2}{15}$ sq.cm
- (c) $\frac{3}{16}$ sq.cm
- (d) $\frac{3}{14}$ sq.cm

Answer: (c) $\frac{3}{16}$ sq.cm

Question 10.

The base of an isosceles triangle is 10 cm and one of its equal sides is 13 cm. The area of the triangle is

- (a) 80 cm^2
- (b) 100 cm^2
- (c) 50 cm^2
- (d) 60 cm^2

Answer: (d) 60 cm^2

Question 11.

The area of an equilateral triangle of side 6 cm is

- (a) 18 cm^2
- (b) $9\sqrt{3} \text{ cm}^2$
- (c) $56\sqrt{3} \text{ cm}^2$
- (d) $58\sqrt{3} \text{ cm}^2$



Answer: (b) $9\sqrt{3} \text{ cm}^2$

Question 12.

Length of perpendicular drawn on longest side of a scale Δ is

- (a) Smallest
- (b) Largest
- (c) No relation
- (d) None

Answer: (a) Smallest

Question 13.

A square sheet whose perimeter is 32 cm is painted at the rate of Rs. 5 per m^2 . The cost of painting is:

- (a) ₹320
- (b) ₹350
- (c) ₹340
- (d) ₹160

Answer: (a) ₹320

Question 14.

The area of a triangle whose sides are 12 cm, 16 cm and 20 cm is

- (a) 96 cm^2
- (b) 320 cm^2
- (c) 240 cm^2
- (d) 72 cm^2

Answer: (a) 96 cm^2

Question 15.

Each side of an equilateral triangle measures 10 cm. Then the area of the triangle is

- (a) 43.3 cm^2
- (b) 43.1 cm^2
- (c) 43.4 cm^2
- (d) 43.2 cm^2

Answer: (a) 43.3 cm^2

Question 16.

The length of the sides of a triangle are 5 cm, 7 cm and 8 cm. Area of the triangle is :

- (a) $10\sqrt{3} \text{ cm}^2$
- (b) $100\sqrt{3} \text{ cm}^2$
- (c) 300 cm^2
- (d) $50\sqrt{3} \text{ cm}^2$

Answer: (a) $10\sqrt{3} \text{ cm}^2$

Question 17.

The area of a triangle with base 8 cm and height 10 cm is

- (a) 20 cm^2
- (b) 18 cm^2
- (c) 80 cm^2
- (d) 40 cm^2

Answer: (d) 40 cm^2

Question 18.

Find the length of each side of an equilateral triangle having area of $9\sqrt{3} \text{ cm}^2$

- (a) 36 cm
- (b) 5 cm
- (c) 15 cm
- (d) 6 cm

Answer: (d) 6 cm
