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 cm² 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 cm, QR = 6 cm, RS = 12 cm, PS = 15 cm and PR = 9 cm: (a) 74.98 cm² (b) 25.25 cm² (c) 75 cm² (d) 68.25 cm² Answer: (a) 74.98 cm² 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 cm²
(b) 48 cm, 1820 cm²
(c) 88 cm, 1320 cm²
(d) 48 cm, 1320 cm²

Answer: (d) 48 cm, 1320 cm²

Question 5. ength 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.

he 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 cm²
(b) 100 cm²
(c) 50 cm²

(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) $9\sqrt{3}$ cm²

Question 12.
Length of perpendicular drawn on longest side of a scale △ 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 m². The cost of painting is: (a) $\gtrless 320$

(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 cm² (b) 320 cm² (c) 240 cm² (d) 72 cm²

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 cm²
(b) 43.1 cm²
(c) 43.4 cm²
(d) 43.2 cm²

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) $10\sqrt{3}$ cm² (b) $100\sqrt{3}$ cm² (c) 300 cm² (d) $50\sqrt{3}$ cm²

Answer: (a) $10\sqrt{3}$ cm²

Question 17. The area of a triangle with base 8 cm and height 10 cm is (a) 20 cm² (b) 18 cm² (c) 80 cm² (d) 40 cm² Answer: (d) 40 cm²

Question 18. Find the length of each side of an equilateral triangle having area of 9 root 3 cm square (a) 36 cm (b) 5 cm (c) 15 cm (d) 6 cm

Answer: (d) 6 cm