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 cm, QR = 6 cm, RS = 12 cm, PS = 15 cm and PR = 9 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.
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 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) $9\sqrt{3}$ cm^2
(c) $56\sqrt{3}$ cm^2
(d) $58\sqrt{3}$ cm^2

Answer: (b) $9\sqrt{3}$ 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) $10\sqrt{3}$ cm^2
(b) $100\sqrt{3}$ cm^2
(c) 300 cm^2
(d) $50\sqrt{3}$ cm^2

Answer: (a) $10\sqrt{3}$ 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 root 3 cm square
(a) 36 cm
(b) 5 cm
(c) 15 cm
(d) 6 cm

Answer: (d) 6 cm
