PERL EDUCATION DAILY PRACTICE PAPER

MCQ WORKSHEET-I **HERON'S FORMUL**

- 1. The sides of a triangular plot are in the ratio of 3 : 5 : 7 and its perimeter is 300 m. Find its area. (a) $4\sqrt{30}$ (b) $8\sqrt{30}$ (c) $12\sqrt{30}$ (d) $16\sqrt{30}$
- 2. Find the area of a triangle, two sides of which are 8 cm and 11 cm and the perimeter is 32 cm (a) $1500\sqrt{3}$ (b) $3000\sqrt{3}$ (c) $4500\sqrt{3}$ (d) $6000\sqrt{3}$
- 3. Find the area of a triangle two sides of which are 18cm and 10cm and the perimeter is 42cm. (a) $14\sqrt{11}$ (b) $21\sqrt{11}$ (c) $35\sqrt{11}$ (d) $21\sqrt{11}$
- 4. Sides of a triangle are in the ratio of 12 : 17 : 25 and its perimeter is 540cm. Find its area. (a) 6000 (b) 9000 (c) 12000 (d) none of these
- 5. The height corresponding to the longest side of the triangle whose sides are 42 cm, 34 cm and 20 cm in length is (a) 15 cm (c) 16 cm (b) 36 cm (d) none of these
- 6. A park, in the shape of a quadrilateral ABCD, has $\angle C = 90^\circ$, AB = 9 m, BC = 12 m, CD = 5 m and AD = 8 m. How much area does it occupy? (a) 56.4 m^2 (b) 55.4 m^2 (c) 65.4 m^2 (d) none of these
- 7. Find the area of a quadrilateral ABCD in which AB = 3 cm, BC = 4 cm, CD = 4 cm, DA = 5 cmand AC = 5 cm. (b) 15.4 cm^2 (c) 15.2 cm^2 (d) none of these (a) 15 cm^2
- 8. If the area of an equilateral triangle is $81\sqrt{3}$ cm², then its height is (a) $9\sqrt{3}$ (b) $3\sqrt{3}$ (c) $12\sqrt{3}$ (d) none of these
- 9. A rhombus shaped field has green grass for 18 cows to graze. If each side of the rhombus is 30 m and its longer diagonal is 48 m, how much area of grass field will each cow be getting? (c) 51 m^2 (a) 45 m^2 (b) 48 m^2 (d) none of these
- 10. The altitude of a triangular field is one-third of its base. If the cost of sowing the field at Rs 58 per hectare is Rs. 783 then its altitude is (a) 900 m (b) 600 m (c) 300 m (d) none of these
- 11. A triangle and a parallelogram have the same base and the same area. If the sides of the triangle are 26 cm, 28 cm and 30 cm, and the parallelogram stands on the base 28 cm, find the height of the parallelogram. (a) 12 cm (d) none of these
 - (b) 15 cm (c) 18 cm
- 12. Area of equilateral triangle of side a unit is
 - (a) $\frac{\sqrt{3}}{2}a^2$ (b) $\frac{\sqrt{3}}{4}a^2$ (c) $\frac{\sqrt{3}}{2}a$ (d) none of these

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MCQ WORKSHEET-II HERON'S FORMULA

MATHEMATICS

CLASS-9TH

- 1. The height of an equilateral triangle is 6 cm, then the area of the triangle is (a) $15\sqrt{3}$ (b) $3\sqrt{3}$ (c) $12\sqrt{3}$ (d) none of these
- 2. The area of an isosceles triangle each of whose equal sides is 13 m and whose base is 24 m = (a) 45 m^2 (b) 48 m^2 (c) 60 m^2 (d) none of these
- 3. The base of an isosceles triangle is 24 cm and its area is 192 cm², then its perimeter is (a) 64 cm (b) 65 cm (c) 68 cm (d) none of these
- 4. The difference between the sides at right angles in a right angled triangle is 14 cm. If the area of the triangle is 120 cm², then the perimeter of the triangle is
 (a) 64 cm
 (b) 60 cm
 (c) 68 cm
 (d) none of these
- 5. The base of a triangular field is three times its altitudes. If the cost of sowing the field at Rs 58 per hectare is Rs. 783 then its base is
 (a) 900 m
 (b) 600 m
 (c) 1200 m
 (d) none of these
- 6. The length of altitude of a equilateral triangle of side a unit is

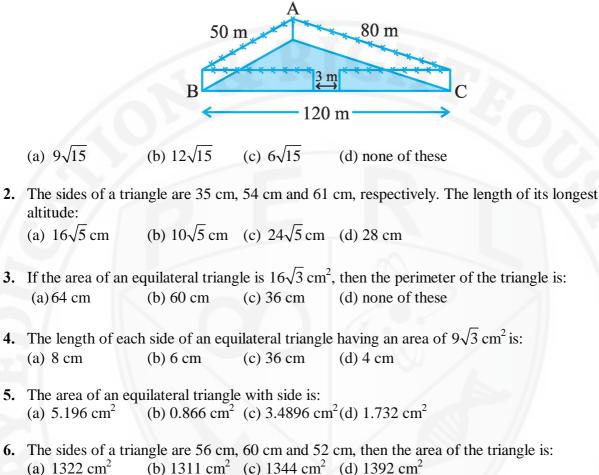
(a) $\frac{\sqrt{3}}{2}a^2$ (b) $\frac{\sqrt{3}}{4}a^2$ (c) $\frac{\sqrt{3}}{2}a$ (d) none of these

- 7. The area of the triangle whose sides are 42 cm, 34 cm and 20 cm in length is
 (a) 150 cm²
 (b) 336 cm²
 (c) 300 cm²
 (d) none of these
- 8. An isosceles triangle has perimeter 30 cm and each of the equal sides is 12 cm. Find the area of the triangle in cm² is.
 - (a) $9\sqrt{15}$ (b) $12\sqrt{15}$ (c) $6\sqrt{15}$ (d) none of these
- 9. The height corresponding to the longest side of the triangle whose sides are 91 cm, 98 cm and 105 cm in length is
 - (a) 76.4 cm (b) 78.4 cm (c) 65.4 cm (d) none of these
- **10.** If the area of an equilateral triangle is $36\sqrt{3}$ cm², then its perimeter is (a) 64 cm (b) 60 cm (c) 36 cm (d) none of these
- 11. The base of a right angled triangle is 48 cm and its hypotenuse is 50 cm then its area is
 (a) 150 cm²
 (b) 336 cm²
 (c) 300 cm²
 (d) none of these
- 12. A field is in the shape of a trapezium whose parallel sides are 25 m and 10 m. The non-parallel sides are 14 m and 13 m. Find the area of the field.
 (a) 89.4 m²
 (b) 89.075 m²
 (c) 89.75 m²
 (d) none of these



MCO WORKSHEET-III HERON'S FORMULA

1. A triangular park ABC has sides 120m, 80m and 50m. A gardener *Dhania* has to put a fence all around it and also plant grass inside. How much area in m² does she need to plant?

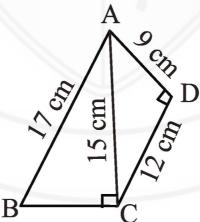


- 7. The perimeter of an equilateral triangle is 60 m. The area is: (a) $15\sqrt{3}$ m² (b) $3\sqrt{3}$ m² (c) $12\sqrt{3}$ m² (d) none of these
- 8. An isosceles right triangle has area 8 cm², then length of its hypotenuse is (a) $\sqrt{32}cm$ (b) $\sqrt{16}cm$ (c) $\sqrt{48}cm$ (d) $\sqrt{24}cm$
- **9.** A traffic signal board indicating 'SCHOOL AHEAD' is an equilateral triangle with side a, then area of the traffic signal is:
 - (a) $\frac{\sqrt{3}}{2}a^2$ (b) $\frac{\sqrt{3}}{4}a^2$ (c) $\frac{\sqrt{3}}{2}a$ (d) none of these
- 10. The base of a triangle is 12 cm and height is 8 cm, then the area of a triangle is: (a) 24 cm^2 (b) 96 cm^2 (c) 48 cm^2 (d) 56 cm^2

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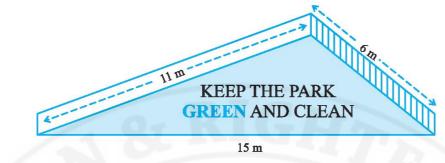
MCQ WORKSHEET-IV HERON'S FORMULA

- 1. The sides of a triangle are 3 cm , 4 cm and 5 cm. Its area is (a) 12 cm^2 (b) 15 cm^2 (c) 6 cm^2 (d) 9 cm^2
- 2. The area of isosceles triangle whose equal sides are equal to 3 cm and other side is 4 cm. Its area is
 - (a) 20 cm^2 (b) $4\sqrt{5} \text{ cm}^2$ (c) $2\sqrt{5} \text{ cm}^2$ (d) 10 cm^2
- 3. The area of a triangular sign board of sides 5 cm , 12 cm and 13 cm is
 - (a) $\frac{65}{2}$ cm² (b) 30 cm² (c) 60 cm² (d) 12 cm²
- 4. The side of a triangle are in the ratio of 25 : 14 : 12 and its perimeter is 510m. The greatest side of the triangle is
 (a) 120 m
 (b) 170 m
 (c) 250 m
 (d) 270 m
- 5. The perimeter of a right triangle is 60 cm and its hypotenuse is 26 cm. The other two sides of the triangle are
 (a) 24 cm. 10 cm (b) 25 cm. 9 cm (c) 20 cm. 14 cm (d) 26 cm. 8 cm
- 6. The area of quadrilateral ABCD in which AB = 3 cm, BC = 4 cm, CD = 4 cm, DA = 5 cm and AC = 5 cm is (a) 15.2 cm^2 (b) 14.8 cm^2 (c) 15 cm^2 (d) 16.4 cm^2
- 7. The area of trapezium in which the parallel sides are 28 m and 40 m, non parallel sides are 9 m and 15 m is
 (a) 286 m²
 (b) 316 m²
 (c) 306 m²
 (d) 296 m²
- 8. The area of quadrilateral ABCD in the below figure is (a) 57 cm^2 (b) 95 cm^2 (c) 102 cm^2 (d) 114 cm^2



- **9.** A traffic signal board indicating 'SCHOOL AHEAD' is an equilateral triangle with side a, then height of the traffic signal is:
 - (a) $\frac{\sqrt{3}}{2}a^2$ (b) $\frac{\sqrt{3}}{4}a^2$ (c) $\frac{\sqrt{3}}{2}a$ (d) none of these

10. There is a slide in a park. One of its side walls has been painted in some colour with a message "KEEP THE PARK GREEN AND CLEAN". If the sides of the wall are 15 m, 11 m and 6 m, The area painted in colour is:



(a) $10\sqrt{2} \text{ m}^2$ (b) $20\sqrt{2} \text{ m}^2$ (c) $30\sqrt{2} \text{ m}^2$ (d) none of these

- 11. An isosceles right triangle has area 8 cm2. The length of its hypotenuse is
 - (a) $\sqrt{32}$ cm (b) $\sqrt{16}$ cm (c) $\sqrt{48}$ cm (d) $\sqrt{24}$ cm
- 12. The edges of a triangular board are 6 cm, 8 cm and 10 cm. The cost of painting it at the rate of 9 paise per cm2 is(a) Rs 2.00 (b) Rs 2.16 (c) Rs 2.48 (d) Rs 3.00
- **13.** The area of an isosceles triangle having base 2 cm and the length of one of the equal sides 4 cm, is
 - (a) $\sqrt{15}$ cm² (b) $\sqrt{\frac{15}{2}}$ cm² (c) $2\sqrt{15}$ cm² (d) $4\sqrt{15}$ cm²
- 14. The sides of a triangle are 35 cm, 54 cm and 61 cm, respectively. The length of its longest altitude

(a)
$$16\sqrt{5}$$
 cm (b) $10\sqrt{5}$ cm (c) $24\sqrt{5}$ cm (d) 28 cm

15. If the area of an equilateral triangle is $16\sqrt{3}$ cm², then the perimeter of the triangle is (a) 48 cm (b) 24 cm (c) 12 cm (d) 36 cm