

Exercise A

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 (b) 36 cm (c) 16 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, $DA = 5$ cm and $AC = 5$ cm.
 (a) 15 cm^2 (b) 15.4 cm^2 (c) 15.2 cm^2 (d) none of these
8. If the area of an equilateral triangle is $81\sqrt{3} \text{ cm}^2$, 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?
 (a) 45 m^2 (b) 48 m^2 (c) 51 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 (b) 15 cm (c) 18 cm (d) none of these
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