Bal Bharati PUBLIC SCHOOL RGPPL RATNAGIRI ACADEMIC YEAR 2022-23 Worksheet No. 1 Subject:MATHEMATICS

Grade: IX -CH-12-HERON'S FORMULA

- 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) 26 cm (c) 16 cm

(a) 15 cm (b) 36 cm (c) 16 cm (d) none of these

- 6 The height of an equilateral triangle measures 9cm. Find its area, correct to two places of decimals (use $\sqrt{3} = 1.73$)
- 7 Find the cost of laying grass in a triangular field of sides 50 m, 65 m and 65 m at the rate of Rs 7 per m².
- 8 The perimeter of a triangular field is 420 m and its sides are in the ratio 6 : 7 : 8. Find the area of the triangular field.
- 9 A design is made on a rectangular tile of dimensions 50 cm × 70 cm as shown in below Figure. The design shows 8 triangles, each of sides 26 cm, 17 cm and 25 cm. Find the total area of the design and the remaining area of the tile.

