



ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION



CLASS 8

SUBJECT :Algebra and Geometry

Work sheet 6

Marks:15

AREAS OF RECTILINEAR FIGURES(Triangles)

Date:12.4.2020

Answer all the following questions(1×15=15)

MULTIPLE-CHOICE QUESTIONS (MCQ)

Choose the correct answer in each of the following.

- In a $\triangle ABC$, it is given that base = 12 cm and height = 5 cm. Its area is
(a) 60 cm^2 (b) 30 cm^2 (c) $15\sqrt{3} \text{ cm}^2$ (d) 45 cm^2
- The lengths of three sides of a triangle are 20 cm, 16 cm and 12 cm. The area of the triangle is
(a) 96 cm^2 (b) 120 cm^2 (c) 144 cm^2 (d) 160 cm^2
- Each side of an equilateral triangle measures 8 cm. The area of the triangle is
(a) $8\sqrt{3} \text{ cm}^2$ (b) $16\sqrt{3} \text{ cm}^2$ (c) $32\sqrt{3} \text{ cm}^2$ (d) 48 cm^2
- The base of an isosceles triangle is 8 cm long and each of its equal sides measures 6 cm. The area of the triangle is
(a) $16\sqrt{5} \text{ cm}^2$ (b) $8\sqrt{5} \text{ cm}^2$ (c) $16\sqrt{3} \text{ cm}^2$ (d) $8\sqrt{3} \text{ cm}^2$
- The base of an isosceles triangle is 6 cm and each of its equal sides is 5 cm. The height of the triangle is
(a) 8 cm (b) $\sqrt{30} \text{ cm}$ (c) 4 cm (d) $\sqrt{11} \text{ cm}$
- Each of the two equal sides of an isosceles right triangle is 10 cm long. Its area is
(a) $5\sqrt{10} \text{ cm}^2$ (b) 50 cm^2 (c) $10\sqrt{3} \text{ cm}^2$ (d) 75 cm^2

7. Each side of an equilateral triangle is 10 cm long. The height of the triangle is
(a) $10\sqrt{3}$ cm (b) $5\sqrt{3}$ cm (c) $10\sqrt{2}$ cm (d) 5 cm
8. The height of an equilateral triangle is 6 cm. Its area is
(a) $12\sqrt{3}$ cm² (b) $6\sqrt{3}$ cm² (c) $12\sqrt{2}$ cm² (d) 18 cm²
9. The lengths of the three sides of a triangular field are 40 m, 24 m and 32 m respectively. The area of the triangle is
(a) 480 m² (b) 320 m² (c) 384 m² (d) 360 m²
10. The sides of a triangle are in the ratio 5 : 12 : 13 and its perimeter is 150 cm. The area of the triangle is
(a) 375 cm² (b) 750 cm² (c) 250 cm² (d) 500 cm²
11. The lengths of the three sides of a triangle are 30 cm, 24 cm and 18 cm respectively. The length of the altitude of the triangle corresponding to the smallest side is
(a) 24 cm (b) 18 cm (c) 30 cm (d) 12 cm
12. The base of an isosceles triangle is 16 cm and its area is 48 cm². The perimeter of the triangle is
(a) 41 cm (b) 36 cm (c) 48 cm (d) 324 cm
13. The area of an equilateral triangle is $36\sqrt{3}$ cm². Its perimeter is
(a) 36 cm (b) $12\sqrt{3}$ cm (c) 24 cm (d) 30 cm
14. Each of the equal sides of an isosceles triangle is 13 cm and its base is 24 cm. The area of the triangle is
(a) 156 cm² (b) 78 cm² (c) 60 cm² (d) 120 cm²
15. The base of a right triangle is 48 cm and its hypotenuse is 50 cm long. The area of the triangle is
(a) 168 cm² (b) 252 cm² (c) 336 cm² (d) 504 cm²

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