## INTERNATIONAL INDIAN SCHOOL <br> BURAIDAH

Worksheet For The Academic Year 2023-24
CLASS: IX SUBJECT: Mathematics DATE: 11/11/2023

## LESSON-12 Heron's Formula

1) Find the area of a triangle whose sides are $9 \mathrm{~cm}, 12 \mathrm{~cm}$ and 15 cm .
2) In $\triangle A B C, A B=15 \mathrm{~cm}, B C=13 \mathrm{~cm}$ and $A C=14 \mathrm{~cm}$. Find the area of the triangle. Also find its height to AC.
3) The perimeter of a triangle is 300 m . If the ratio of its sides are $3: 5: 7$, find the area of the triangle.
4) The sides of a triangle are $35 \mathrm{~cm}, 54 \mathrm{~cm}$ and 61 cm . Find its area.
5) Find the area of an equilateral triangle of side 10 cm .
6) Find the area of an isosceles triangle with two equal sides as 5 cm and third side as 8 cm .
7) Find the area of a right triangle whose base is 12 cm and height is 5 cm .
8) Find the area of a triangular park whose sides are $40 \mathrm{~m}, 32 \mathrm{~m}$ and 24 m .
9) Find the area of an equilateral triangle of side 2 cm .
10) If the area of an equilateral triangle is $\frac{\sqrt{3}}{4} \mathrm{~cm}^{2}$, find the side of the triangle.
11) Find the area of a triangle whose base is 5 cm and altitude is 4 cm .
12) The base of a right triangle is 8 cm and its hypotenuse is 10 cm .

Find its area.

| ANSWERS |  |  |
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| 1) $54 \mathrm{~cm}^{2}$ 2) $84 \mathrm{~cm}^{2}, 12 \mathrm{~cm}$ | 3) $1500 \sqrt{3} \mathrm{~m}^{2}$ |  |
| 4) $420 \sqrt{5} \mathrm{~cm}^{2}$ | 5) $25 \sqrt{3} \mathrm{~cm}^{2}$ | 6) $12 \mathrm{~cm}^{2}$ |
| 7) $30 \mathrm{~cm}^{2}$ | 8) $384 \mathrm{~m}^{2}$ | 9) $\sqrt{3} \mathrm{~cm}^{2}$ |
| 10) 1 cm | 11) $10 \mathrm{~cm}^{2}$ | 12) $24 \mathrm{~cm}^{2}$ |

