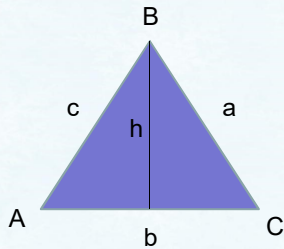


### Area of a Triangle



$$A = \frac{1}{2}bh$$

$$A = \frac{1}{2}b(c\sin A)$$

$$A = \frac{1}{2}bc\sin A$$

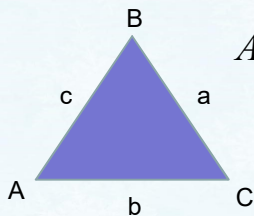
$$\text{Area} = \frac{1}{2}bc\sin A \quad \text{Area} = \frac{1}{2}ab\sin C \quad \text{Area} = \frac{1}{2}ac\sin B$$

1

Ex.1: Find the area of a triangle with two sides of lengths 90m and 52m and an included angle of  $102^\circ$ .

2

### Area of a Triangle Heron's Area Formula



$$\text{Area} = \sqrt{s(s-a)(s-b)(s-c)}$$

$$s = \frac{a+b+c}{2}$$

3

Ex.2: Find the area of a triangle with side lengths of 43m, 53m and 72m.

4