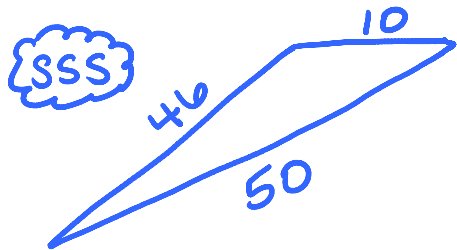


# Area of Non-Right Triangles

Given 3 Sides :  $s = \frac{a+b+c}{2} \rightarrow A = \sqrt{s(s-a)(s-b)(s-c)}$

Given SAS :  $A = \frac{1}{2} a \cdot b \cdot \sin C$



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

$a = 10$   
 $b = 46$   
 $c = 50$

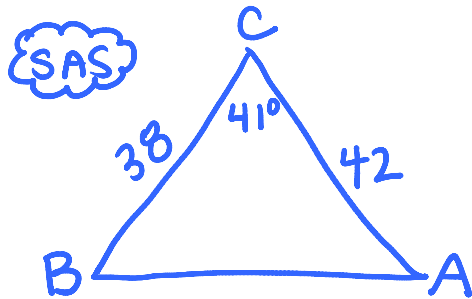
$$s = \frac{(10+46+50)}{2}$$

$$s = 53$$

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

$$A = \sqrt{53(53-10)(53-46)(53-50)}$$

$$A = 218.8$$



$$A = \frac{1}{2} a \cdot b \cdot \sin C$$

$$A = \left(\frac{1}{2}\right)(38)(42)\sin(41)$$

$$A = 523.5$$