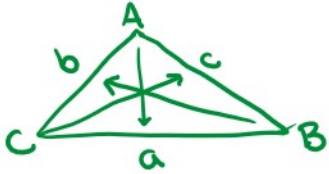


- Right Δ's
- Pythagorean Theorem
 - SOHCAHTOA
 - Inverse Trig.
 - Sum angles in Δ is 180°



- Non-Right Δ's
- Law of Sines
 - Law of Cosines
 - Inverse Trig.
 - Sum angles in Δ is 180°

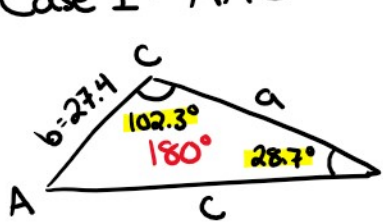
Law of Sines:

$$\frac{\sin A}{a} = \frac{\sin B}{b} = \frac{\sin C}{c}$$

OR

$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

Case 1: AAS



A = 49°
a = 43.06
c = 55.75

$$\frac{\sin 49}{a} = \frac{\sin 28.7}{27.4} = \frac{\sin 102.3}{c}$$

$$\frac{\sin 49}{a} = 0.0175 = \frac{\sin 102.3}{c}$$

$$\frac{\sin 49}{0.0175} = a \quad \left\{ \quad C = \frac{\sin 102.3}{0.0175} \right.$$

a = 43.06 C = 55.75

Case 2: ASA

A = 55° B = 42° c = 0.75

C = 83°
a = 0.62
b = 0.51

$$A + B + C = 180^\circ$$

$$\frac{55^\circ + 42^\circ + C}{-97} = \frac{180^\circ}{-97}$$

C = 83°

$$\frac{\sin 55}{a} = \frac{\sin 42}{b} = \frac{\sin 83}{0.75}$$

↓

1.323

$$\frac{\sin 55}{a} = 1.323$$

$$\frac{\sin 55}{1.323} = a$$

0.62 = a

$$\frac{\sin 42}{b} = 1.323$$

$$\frac{\sin 42}{1.323} = b$$

0.51 = b