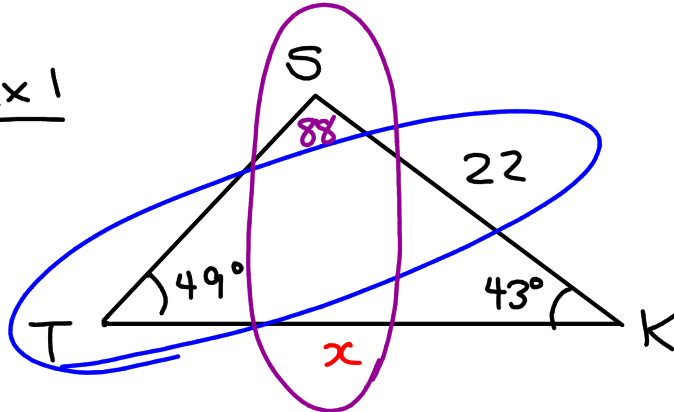# THE SINE LAW (Part I)

- The Sine Law can be used in ANY triangle if you know 2 sides and 1 angle or if you know 2 angles & 1 side.

① $$\frac{\sin A}{a} = \frac{\sin B}{b} = \frac{\sin C}{c}$$     ← looking for an angle

$$\underline{\underline{OR}}$$

② $$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$     ← looking for a side

Ex 1



$$\frac{x}{\sin 88} = \frac{22}{\sin 49} \cdot \sin 88$$

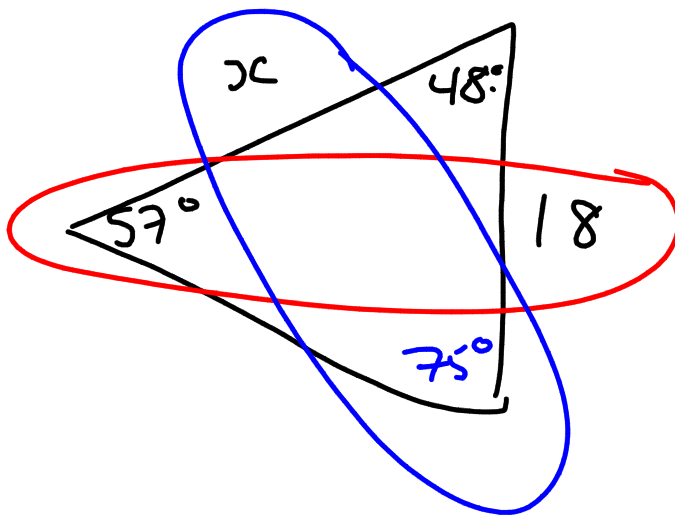$$x = \frac{22 \cdot \sin 88}{\sin 49}$$

$$x = 29.1$$
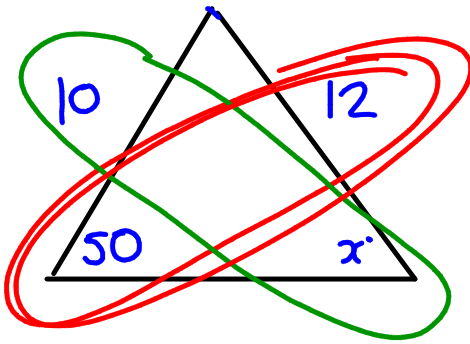
$$10 \, \frac{\sin x}{18} = \frac{10 \cdot \sin 50}{12}$$

$$\sin x = \frac{10 \cdot \sin 50}{12}$$

$$\sin x = 0.63837$$

$$x = 39.7^{\circ}$$

$$\frac{x}{\sin 75} = \frac{18}{\sin 57}$$

$$x = \frac{18 \cdot \sin 75}{\sin 57}$$

$$x = 20.73$$

# 1—4 all, 6ab, 7-10