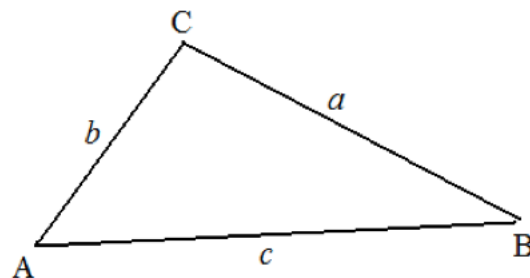


Triangle Area, K:

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

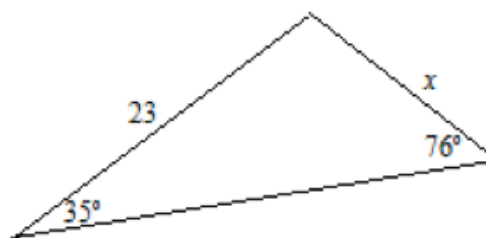
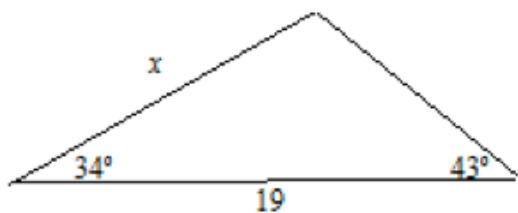


Divide all by $\frac{1}{2}abc$:

$$\text{LAW OF SINES : } \frac{\sin A}{a} = \frac{\sin B}{b} = \frac{\sin C}{c}$$

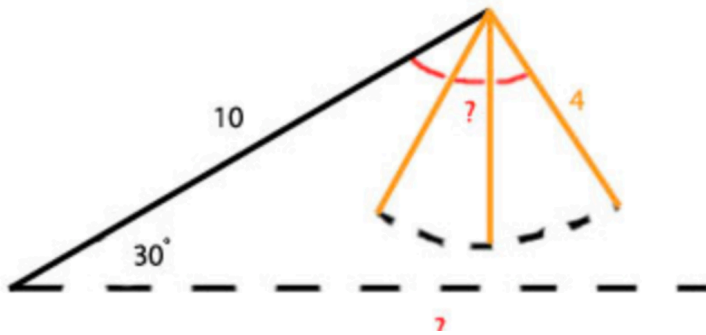
The Law of Sines can help to solve a triangle. "Solving a triangle" means finding the measures of all unknowns sides and angles.

Case I: AAS and ASA

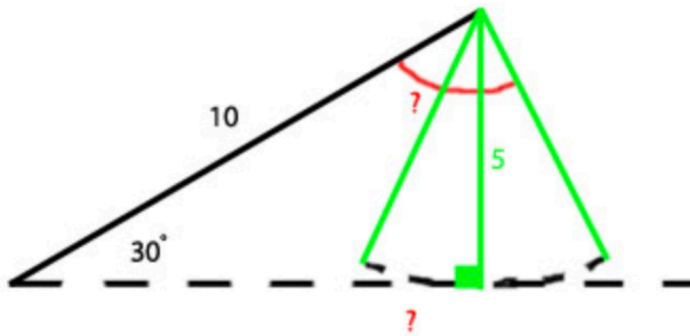


Case II: SSA, The Ambiguous Case

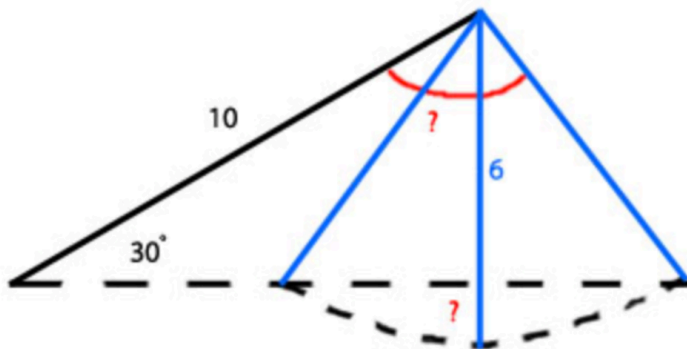
•Situation #1 No Solutions



•Situation #2 One Solution



•Situation #3 Two Solutions



Law of Sines (helps for ASA, AAS, SSA)
Law of Cosines (helps for SAS and SSS)