## **Class Discussion**

Unit 6 Topic 1 Part 1 Law of Sines

Objectives: what is "solving a triangle"? Apply law of sines

To "solve a triangle" means: to find all 3 sides and 3 angles of a triangle

There are 3 types of givens:

1 S: AAS, ASA

2 S : SAS, SSA

3 S : SSS

Law of sines applies to AAS, ASA and SSA

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

Ex 1:

$$a = 25, A = 35^{\circ}, B = 100^{\circ}$$

Ex 2:

$$c = 12, A = 40^{\circ}, B = 65^{\circ}$$

Ex 3:

$$a = 7, b = 11, B = 28^{\circ}$$

$$a = 5, b = 10, B = 65^{\circ}$$

$$a = 5, b = 7, B = 48^{\circ}$$