U2D7   SINE LAW
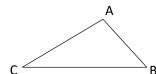
SINE LAW: If looking for an angle: $\dfrac{sinA}{a} = \dfrac{sinB}{b} = \dfrac{sinC}{c}$

> To use the sine law you need one complete side-angle pair.

If looking for a side: $\dfrac{a}{sinA} = \dfrac{b}{sinB} = \dfrac{c}{sinC}$

Example 1: Calculate the value of angle A and angle B. Round to one decimal place.

$a = 14, b = 13, c = 15, \sphericalangle C = 67.4°$

Example 2: In $\Delta DEF, E = 108°, F = 32°, e = 7.5\ cm.$ Determine the length of 'd' to one decimal place.

U2D7 Practice: page 101 #1a,2,4a,6,7a,8

U2D8

APPLICATIONS OF SINE LAW

1. Two people stand approximately 50 m apart on level ground. One person measures the angle of elevation of a hot air balloon to be 58º. The other person measures the angle of elevation to be 41°. How far is each person from the hot air balloon?

U2D8 Practice: Page 102 #9, 10, 11, 14 (Sine Law Applications)