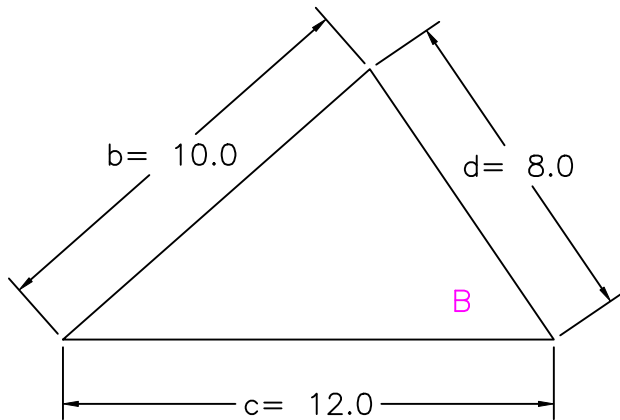


Oblique Triangle Example

4-19-01 Oblique Triangle Example.dwg

The lengths of all three sides known.



Law of Cosine function:

$$\text{Cos } B = \frac{c^2 + d^2 - b^2}{2 \times c \times d}$$

Find Angle "B":

$$\text{Cos } B = \frac{12^2 + 8^2 - 10^2}{2 \times 12 \times 8}$$

$$\text{Cos } B = \frac{144 + 64 - 100}{2 \times 12 \times 8}$$

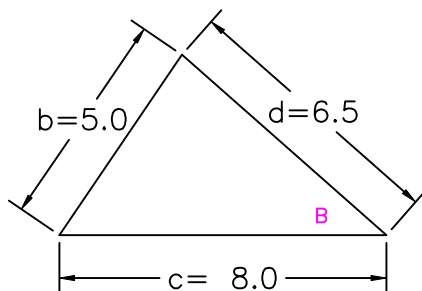
$$\text{Cos } B = \frac{108}{192}$$

$$\text{Cos } B = 0.5625$$

$$B = \boxed{\text{SHIFT}} \text{ Cos } 0.5625$$

$$B = \underline{\underline{55.77113^\circ}}$$

Example 2:



$$B = \underline{\underline{38.62483^\circ}}$$