Answer on Question #51008-Math-Trigonometry

Solve triangle ABC which have angle $A = 25°$; angle $B = 60°$ and a=3. Find c:

Solution

The angle C is

$$C = 180° - (A + B) = 180° - (25° + 60°) = 95°.$$

According to the Sine Rule:

$$\frac{a}{\sin A} = \frac{c}{\sin C}.$$

Thus,

$$c = a\frac{\sin C}{\sin A} = 3\frac{\sin 95°}{\sin 25°} = 7.1.$$