

Answer on Question #53918, Math – Calculus

Solve the triangle.

$$A = 48^\circ, a = 32, b = 27$$

Answer

Due to sine theorem

$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C} \rightarrow \sin B = \frac{b * \sin A}{a} \approx 0.627 \rightarrow B = \sin^{-1}0.627 \approx 39^\circ$$

$$A + B + C = 180^\circ \rightarrow C = 93^\circ$$

$$c = \frac{a * \sin C}{\sin A} \approx 43$$