

## Answer on Question #59654 – Math – Trigonometry

### Question

Solve triangle ABC which have angle A=25.25, angle B=60.51 and a=3.82. Find c.

a)3.6

b)7.0

c)7.4

d)8.8

### Solution

Angle

$$C=180^{\circ} - (25.25^{\circ} + 60.51^{\circ}) = 94.24^{\circ}$$

Using the sine law

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

hence

$$c = a \frac{\sin C}{\sin A} = 3.82 \frac{\sin 94.24^{\circ}}{\sin 25.25^{\circ}} \approx 8.8$$

**Answer:** d) 8.8.