

SINE LAW

Can be used on ANY triangle

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

Dec 6-1:32 PM

Find the value of x:

a) $\frac{3}{\sin 70} = \frac{x}{\sin 40}$
 $x = \frac{3 \sin 40}{\sin 70} = 2.05$

b) $\frac{4}{\sin 75} = \frac{x}{\sin 40}$
 $x = \frac{4 \sin 40}{\sin 75} = 3.75$

c) $\frac{2}{\sin 30} = \frac{x}{\sin 30}$
 $x = 2$

Dec 6-1:35 PM

Solve the following triangles:

$\frac{10}{\sin 45} = \frac{x}{\sin 45}$
 $x = 10$

$\frac{8}{\sin 65} = \frac{x}{\sin 7}$
 $x = \frac{8 \sin 7}{\sin 65} = 0.95$

Dec 6-1:41 PM

1. FIND MISSING ANGLES OF TRIANGLES (180-.....)
2. Set up proportions
3. Make sure Calculator is in Degrees
4. Cross multiply and divide

Dec 11-4:05 PM

$\frac{4}{\sin 20} = \frac{x}{\sin 70}$
 $x = \frac{4 \sin 70}{\sin 20} = 11.5$

$\frac{4}{\sin 65} = \frac{x}{\sin 45}$
 $x = \frac{4 \sin 45}{\sin 65} = 3.45$

Dec 11-4:06 PM

Three boats are near each other. What distance separates boats B and C if the distance, to the nearest metre, separating boats A and B is 35 m?

$\frac{35}{\sin 30} = \frac{x}{\sin 60}$
 $x = \frac{35 \sin 60}{\sin 30} = 60.6$

Dec 6-1:43 PM