## Sine, Cosine and Area Rules - Mixed Problems

Mr Bond

## Non right angled triangle problem solving

1. Here is a non right angled triangle.

a) Calculate the area of $A B C$.
b) Calculate the distance the AC.
2. Calculate the area of the triangle XYZ.


## Non right angled triangle problem solving

3. The area of triangle $A B C$ is $16.25 \mathrm{~cm}^{2}$


The area of $A B C$ is $15.5 \mathrm{~cm}^{2}$.
a) Calculate the length of $B C$.
b) Calculate angle BCD.
4. Calculate the size of angle XYW.


Answers

## Non right angled triangle problem solving

1. Here is a non right angled triangle.

a) Calculate the area of $A B C$.
$32.7 \mathrm{~m}^{2}$
b) Calculate the distance the AC.

$$
8.2 \text { m }
$$

2. Calculate the area of the triangle XYZ.


$$
\text { Area }=27.5 \mathrm{~m}^{2}
$$

## Non right angled triangle problem solving

3. The area of triangle $A B C$ is $16.25 \mathrm{~cm}^{2}$
4. Calculate the size of angle XYW.


The area of $A B C$ is $15.5 \mathrm{~cm}^{2}$.
a)

Calculate the length of BC. 9 cm
b) Calculate angle BCD. $103.6^{\circ}$

