

(C2-2.6a) Name:

Homework Questions 6 – Finding Two Solutions for A Missing Angle

Solve the following problems using the sine rule, give answers to 1dp (*The diagrams are not drawn to scale*)

1. In the Triangle ABC, $BC = 9\text{m}$, $AC = 13.5\text{m}$ and $\angle ABC = 55^\circ$.

Find the 2 possible values for $\angle BAC$

33.1°
146.9°

2. Triangle ABC is such that $AB = 4\text{cm}$, $BC = 6\text{cm}$ and $\angle ACB = 38^\circ$.

Find the 2 possible values for $\angle BAC$

67.4°
112.6°

3. Triangle ABC is such that $AB = 29\text{cm}$, $AC = 14\text{cm}$ and $\angle ACB = 45^\circ$.

Find the 2 possible values for $\angle ABC$

20.0°
160.0°

4. In Triangle ABC is such that $AB = 14\text{cm}$, $AC = 7\text{cm}$ and $\angle ACB = 56^\circ$.

Find the 2 possible values for $\angle ABC$

24.5°
155.5°

5. In triangle ABC is such that $AB = 49\text{cm}$, $BC = 26\text{cm}$ and $\angle BAC = 30^\circ$.

Find the 2 possible values for $\angle ACB$

70.4°
109.6°