Practice worksheet | Trigonometry

Sine rule and ambiguous cases

Name: _____ Date: _____

6 questions | 18 marks

1. $A = 30^\circ$, $B = 90^\circ$, $a = 6$ cm. Find b. [3 marks]

2. $A = 45^\circ$, $B = 60^\circ$, $a = 10$ cm. Find b exactly. [3 marks]

3. $A = 30^\circ$, $a = 5$ cm, $b = 12$ cm. Decide how many triangles exist. [3 marks]

4. Given $A = 30^\circ$, $a = 5$ cm, $b = 5\sqrt{2}$ cm, find all possible B,C pairs. [3 marks]

5. $A = 120^\circ$, $a = 10$ cm, $b = 5$ cm. Find B and C to one decimal place. [3 marks]

6. A survey triangle has $A = 40^\circ$, $B = 65^\circ$ and $a = 18$ m. Find b to one decimal place and explain why $b > a$. [3 marks]