Practice worksheet | Pythagoras and Trigonometry

Cosine rule

Name: _____ Date: _____

6 questions | 16 marks

1. Sides 3 m and 5 m include 60°. Find the opposite side exactly. [2 marks]

2. A triangle has sides 7 cm, 8 cm and 9 cm. Find the angle opposite 9 cm to 0.1°. [3 marks]

3. Sides 10 m and 12 m include 120°. Find the third side to 0.1 m. [3 marks]

4. A triangle has sides 8 cm, 15 cm and 17 cm. Use the cosine rule to classify the angle opposite 17 cm. [3 marks]

5. In triangle ABC, $b = 8$ cm, $c = 11$ cm and $A = 40^\circ$. Find a to 0.1 cm. [3 marks]

6. You know all three sides but no angles. Which rule gives a starting angle, and why is the sine rule not a starting method? [2 marks]