Practice worksheet | Practical trigonometry

Cosine rule

Name: _____ Date: _____

6 questions | 15 marks

1. Two sides are 8 m and 11 m and their included angle is 50°. Find the third side to one decimal place. [2 marks]

2. Find the angle opposite 13 in a triangle with sides 9, 10 and 13. Round to one decimal place. [2 marks]

3. Sides of 12 cm and 17 cm enclose 40°. Find the opposite side to one decimal place. [2 marks]

4. Use cosine rule to show that sides 8, 15 and 17 form a right triangle. [3 marks]

5. Could sides 4 cm, 5 cm and 12 cm form a triangle? Explain before calculating an angle. [3 marks]

6. For $a = 6$, $b = 9$, $C = 110^\circ$, a student adds $2ab\cos C$ instead of subtracting it. Correct the rule and find c. [3 marks]