Practice worksheet | Pythagoras and Trigonometry

Precision and practical applications

Name: _____ Date: _____

6 questions | 15 marks

1. A right triangle has hypotenuse 14.2 cm and leg 8.1 cm. Find its other leg to 0.1 cm. [3 marks]

2. A student uses $\tan 37^\circ \approx 0.75$ for a height with horizontal distance 20 m. Compare their height with $20\tan 37^\circ$, both to 0.1 m. [3 marks]

3. A calculation gives $\sin A = 1.08$ for a triangle. What should you conclude? [2 marks]

4. A map shows horizontal separation 80 m and a line of sight rises 25 m. Should 80 m be used as the hypotenuse? Explain. [2 marks]

5. Sides 12 cm and 17 cm include 52°. State an appropriate method for the third side and write its formula. [3 marks]

6. A survey estimates a tower height assuming level ground. Why should the final report state that assumption? [2 marks]