Practice worksheet | Geometry and transformations

Explaining geometric reasoning

Name: _____ Date: _____

6 questions | 17 marks

1. An isosceles triangle has vertex angle 50°. Find both base angles with reasons. [3 marks]

2. Find the angle adjacent to 124° on a straight line and name the fact used. [2 marks]

3. Equilateral triangles have side lengths 2 cm and 5 cm. Are they similar, congruent or neither? Explain. [3 marks]

4. Why is a crossing U in the equal-radius bisector construction equally far from A and B? [2 marks]

5. AB has midpoint M. Explain why a positive enlargement maps M to the midpoint of the image segment. [3 marks]

6. A student says “two corresponding angles are equal, so the triangles are congruent”. Correct this and give sufficient extra information. [4 marks]