Practice worksheet | Geometry and proof

Testing and justifying solutions

Name: _____ Date: _____

6 questions | 15 marks

1. Disprove: all quadrilaterals with four equal sides have four right angles. [3 marks]

2. A claimed triangle has sides 3, 4, 8. Explain why it cannot serve as a triangle example. [2 marks]

3. A cyclic quadrilateral has opposite angles 85° and 95°. Is this information consistent? [2 marks]

4. A radius 10 circle has a chord 12 long. A student finds its centre distance 8. Check it. [2 marks]

5. A square-construction algorithm is tested only on horizontal sides. Give another important test and explain. [3 marks]

6. Why must corresponding vertices be named consistently when using triangle similarity? [3 marks]