Practice worksheet | Transformations

# Explaining what stays unchanged

Name: _____ Date: _____

6 questions | 14 marks

**1.** A 5 cm by 2 cm rectangle is reflected. Find its image perimeter and area. [2 marks]

**2.** Which properties stay unchanged under a translation: coordinates, side lengths, angle sizes, area? [2 marks]

**3.** A triangle is rotated 90°. Does its clockwise vertex order reverse? Explain. [2 marks]

**4.** A rule maps a 2 cm side to a 4 cm side. Could it be a translation, reflection or rotation? Explain. [2 marks]

**5.** A right triangle has perpendicular sides 4 units and 3 units. It is reflected in the y-axis. Find its area and state whether it is congruent to the original. [3 marks]

**6.** A student claims two shapes must be congruent because they have equal area. Is this enough? Give a counterexample. [3 marks]