Practice worksheet | Congruence and similarity

Triangle similarity

Name: _____ Date: _____

6 questions | 15 marks

1. A triangle has angles 45° and 75°. Another has angles 45° and 60°. Are they similar? Explain. [3 marks]

2. Are triangles with sides 4, 5, 6 cm and 8, 10, 12 cm similar? State a reason. [2 marks]

3. Are triangles with sides 3, 4, 5 cm and 6, 8, 11 cm similar? [2 marks]

4. Two triangles have included angle 50°. The sides enclosing it are 6 cm and 9 cm in one, 10 cm and 15 cm in the other. Are they similar? [3 marks]

5. Given $\triangle ABC \sim \triangle DEF$, $AB = 5$ cm, $DE = 15$ cm and $BC = 7$ cm. Find EF. [3 marks]

6. Two similar triangles have scale factor 1. Explain what stronger conclusion follows. [2 marks]