Practice worksheet | Practical trigonometry

Similarity and scale

Name: _____ Date: _____

6 questions | 13 marks

1. Similar triangles have corresponding sides 8 cm and 20 cm. A second side of the smaller triangle is 12 cm. Find the matching larger side. [2 marks]

2. A model and real object have scale 1:50. A model length is 14 cm. Find the real length in metres. [2 marks]

3. Two similar shapes have length factor 1.5 from A to B. Shape A has perimeter 32 cm. Find B’s perimeter. [2 marks]

4. A triangle of area $18\,\text{cm}^2$ is enlarged with length factor 4. Find the new area. [2 marks]

5. Triangles PQR and XYZ are similar in that order. $PQ = 10$, $QR = 14$, $XY = 15$. Find YZ. [2 marks]

6. A student says: “The area doubled, so every side doubled.” Explain and give the actual length factor. [3 marks]