## Geometry (Q 4, Paper 2)

2001
4 (a) Prove that the triangle with sides of lengths 10 units, 24 units and 26 units is right-angled.

(b) Prove that a line which is parallel to one side-line of a triangle, and cuts a second side, will cut the third side in the same proportion as the second.
(c) (i) Draw a square with sides 7 cm and mark $o$, the point of intersection of the diagonals.
(ii) Draw the image of the square under the enlargement with centre $o$ and scale factor $\frac{1}{2}$.
(iii) Calculate the area of the image square.
(iv) Under another enlargement the area of the image of the square with sides 7 cm is $196 \mathrm{~cm}^{2}$.
What is the scale factor of this englargement?

## Answers

4 (c) (iii) $12.25 \mathrm{~cm}^{2}$ (iv) 2

