## Geometry (Q 4, Paper 2)

2005
4 (a) In the diagram, the line $L$ is parallel to the base of the isosceles triangle.
(i) Find $x$.
(ii) Find $y$.

(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 opqr with sides 8 cm .
(ii) Draw the image of this square under the enlargement with centre $o$ and scale factor 0.25.
(iii) Calculate the area of this image square.
(iv) Under another enlargement the area of the image of the square opqr is $100 \mathrm{~cm}^{2}$. What is the scale factor of this enlargement?

## Answers

4
(a) (i) $65^{\circ}$
(ii) $65^{\circ}$
(c) (iii) $4 \mathrm{~cm}^{2}$
(iv) 1.25

