## Geometry (Q 4, Paper 2)

2007
4 (a) In the diagram, two sides of the triangle are produced.
(i) Find $x$.
(ii) Find $y$.

(b) Prove that the products of the lengths of the sides of a triangle by the corresponding altitudes are equal.
(c) The triangle ocd is the image of the triangle oab under an enlargement with centre $o$. $|o a|=4,|a c|=7 \cdot 2$ and $|c d|=7$.

(i) Find the scale factor of the enlargement.
(ii) Find $|a b|$.
(iii) The area of the triangle $o a b$ is 4.5 square units.

Find the area of the triangle ocd.

## Answers

4
(a) (i) $100^{\circ}$
(ii) $80^{\circ}$
(c) (i) 2.8
(ii) 2.5
(iii) 35.28 square units

