## Geometry (Q 4, Paper 2)

## 1997

4 (a) Find the area of triangle $a b c$ if $|\angle a b c|=90^{\circ}$, $|a c|=26$ and $|b c|=10$.

(b) Prove that the products of the lengths of the sides of a triangle by the corresponding altitudes are equal.
(c) The triangle odc is the image of the triangle oab under an enlargement, centre $o$.
$|c d|=9$ and $|a b|=15$.
(i) Find the scale factor of the enlargement.
(ii) If the area of triangle oab is 87.5 square units, find the area of triangle odc.
(iii) Write down the area of the region $a b c d$.


## Answers

4 (a) 120 square units
(i) $\frac{5}{3}$
(ii) 52.5
(iii) 31.5 square units

