## Geometry (Q 4, Paper 2)

## 1996

4 (a) $|p r|=|q r|=|r s|$ and $|\angle p r q|=50^{\circ}$.
Find
(i) $|\angle p q r|$
(ii) $|\angle p s r|$.

(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) The triangle $x y z$ is the image of the triangle abc under the enlargement, centre $o$, with $|a b|=4$ and $|x z|=12$. The scale factor of the enlargement is 1.5 .
(i) Find $|x y|$.
(ii) Find $\left|a_{c}\right|$.

(iii) If the area of triangle $a b c$ is
12.2 square units, calculate the area of triangle $x y z$.

## Answers

4
(a) (i) $65^{\circ}$
(ii) $25^{\circ}$
(c) (i) 6
(ii) 8
(iii) 27.45 square units

