## Geometry (Q 4, Paper 2)

## 2008

4 (a) In the triangle $a b c$,
$|\angle a b c|=90^{\circ},|b c|=4 \cdot 5$ and $|a c|=7 \cdot 5$.
Find $|a b|$.

(b) Prove that the opposite sides of a parallelogram have equal lengths.
(c) (i) Construct an equilateral triangle pqr of side 8 cm .
(ii) Construct the image of the triangle pqr under the enlargement of scale factor 0.75 and centre $q$.
(iii) Given that the area of the triangle $p q r$ is $16 \sqrt{3} \mathrm{~cm}^{2}$, find the area of the image triangle in the form $k \sqrt{3} \mathrm{~cm}^{2}$.

## Answers

4 (a) 6
(c) (iii) $9 \sqrt{3}$

