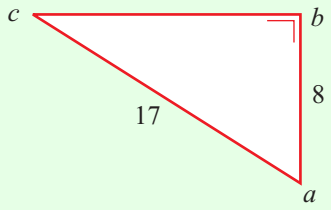
GEOMETRY (Q 4, PAPER 2)

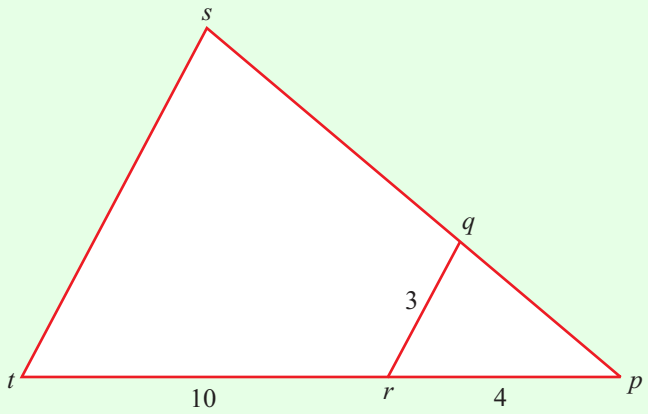
2004

4 (a) In the triangle abc,
$|ab| = 8$, $|ac| = 17$ and $|\angle abc| = 90^\circ$.
Find $|bc|$.



(b) Prove that the opposite sides of a parallelogram have equal lengths.

(c) The triangle pst is the image of the triangle pqr under an enlargement with centre p.



$|pr| = 4$, $|rt| = 10$ and $|qr| = 3$.

(i) Find the scale factor of the enlargement.

(ii) Find $|st|$.

(iii) The area of the triangle pqr is 5 square units.
Find the area of the quadrilateral $qstr$.

ANSWERS

4 (a) 15

(c) (i) 3.5 (ii) 10.5 (iii) 56.25 square units