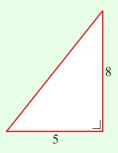
## TRIGONOMETRY (Q 5, PAPER 2)

## 2006

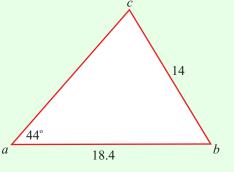
- 5 (a) The lengths of two sides of a right-angled triangle are shown in the diagram.
  - (i) Copy the diagram into your answer book and on it mark the angle A such that  $\tan A = \frac{5}{8}$ .
  - (ii) Find the area of the triangle.



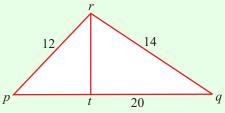
(b) In the triangle *abc*,

$$|ab| = 18.4, |bc| = 14 \text{ and } |\angle cab| = 44^{\circ}.$$

- (i) Find  $|\angle bca|$ , correct to the nearest degree.
- (ii) Find the area of the triangle *abc*, correct to the nearest whole number.



- (c) The lengths of the sides of the triangle pqr are |pq| = 20, |qr| = 14 and |pr| = 12.
  - (i) Find  $|\angle rpq|$ , correct to one decimal place.
  - (ii) Find |rt|, where  $rt \perp pq$ . Give your answer correct to the nearest whole number.



## Answers

- 5 (a) (ii) 20 units<sup>2</sup>
  - (b) (i) 66°
- (ii) 121 units<sup>2</sup>
- (c) (i)  $43.5^{\circ}$
- (ii) 8 units