

- 8 The point  $A$  has coordinates  $(2, 6)$ , the point  $B$  has coordinates  $(6, 8)$  and the point  $C$  has coordinates  $(4, 2)$ .

(a) Find the exact length of

(i)  $AB$

(ii)  $BC$

(iii)  $AC$

(4)

(b) Find the size of each angle of triangle  $ABC$  in degrees.

(3)

The points  $A$ ,  $B$  and  $C$  lie on a circle with centre  $P$ .

(c) Find the coordinates of  $P$ .

(2)

(d) Find the exact length of the radius of the circle in the form  $\sqrt{a}$ , where  $a$  is an integer.

(2)

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**Question 8 continued**

Handwriting practice area with horizontal dotted lines.



**Question 8 continued**

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**(Total for Question 8 is 11 marks)**

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