# THE CIRCLE (Q 3, PAPER 2)

## LESSON NO. 4: LINES INTERSECTING CIRCLES

#### 2007

- 3 (b) The line x 3y = 0 intersects the circle  $x^2 + y^2 = 10$  at the points *a* and *b*.
  - (i) Find the coordinates of *a* and the coordinates of *b*.
  - (ii) Show that [*ab*] is a diameter of the circle.

## 2005

- 3 (b) The line y = 10 2x intersects the circle  $x^2 + y^2 = 40$  at the points *a* and *b*. (i) Find the coordinates of *a* and the co-ordinates of *b*.
  - (ii) Show the line, the circle and the points of intersection on a coordinate diagram.

## 2003

- 3 (b) The line x 2y + 5 = 0 intersects the circle  $x^2 + y^2 = 10$  at the points *a* and *b*.
  - (i) Find the co-ordinates of a and the co-ordinates of b.
  - (ii) Draw a coordinate diagram on graph paper, showing the line, the circle and the points of intersection.

