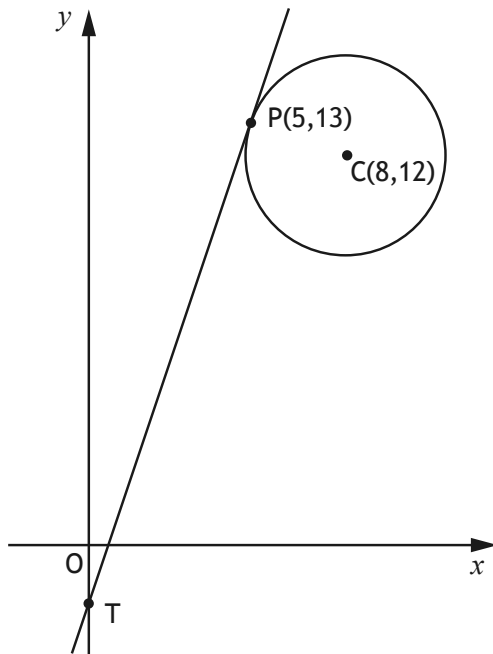**15.** A circle has centre C(8,12).

The point P(5,13) lies on the circle as shown.

(a) Find the equation of the tangent at P. **3**

The tangent from P meets the y-axis at the point T.

(b) (i) State the coordinates of T. **1**

(ii) Find the equation of the circle that passes through the points C, P and T. **3**

[END OF QUESTION PAPER]