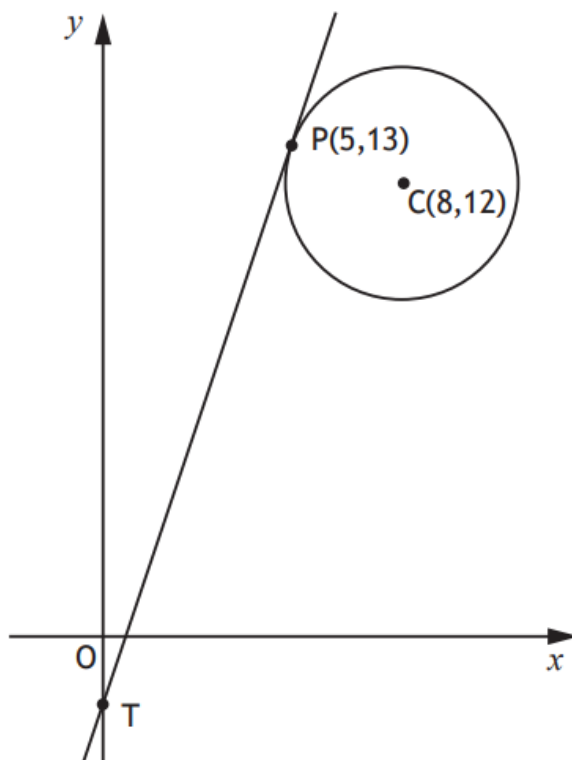


Higher Maths
SQA 2019 Paper 2
Question 15



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

Answers:

(a) $y = 3x - 2$

(b) (i) $(0, -2)$

(ii) $(x-4)^2 + (y-5)^2 = 65$