

The circle with equation $(x + 1)^2 + (y - 2)^2 = 85$ and the straight line with equation y = 3x - 20 are shown in the diagram. The line intersects the circle at A and B, and the centre of the circle is at C.

(a)	Find, by calculation, the coordinates of A and B .	[4]

Find an equation of the circle which has its centre at C and for which the $y = 3x - 20$ is a tangent to the circle.	e line with equation [4]
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