# Perpendicular Lines and the equatic 

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1) Perpendicular Lines and the equation of a tangent: Easier
7. A circle C has centre $(2,5)$ The point A $(11,8)$ lies on the circumference of the circle

Find the equation of the tangent to the circle at A

1) Perpendicular Lines and the equation of a tangent: Medium
8. A cirlce has the equation $x^{2}+y^{2}=5$
a) Write down the centre of the circle
b) Write down the exact length of the radius of the circle

P is the point $(1,2)$ on the cirlce $x^{2}+y^{2}=5$
c) Work out the equation of the tangent to the circle at P

1) Perpendicular Lines and the equation of a tangent: Harder
9. The diagram shows a circle of radius 5 cm , centre the origin.


Find the equation of the tangent to the circle at $(3,4)$

