

Fill in the Blanks

Equation of a Tangent to a Circle

Equation of Circle	Point on Circle	Gradient of Radius	Gradient of Tangent	Equation of Tangent
$x^2 + y^2 = 45$	(3, 6)	2	$-\frac{1}{2}$	
$x^2 + y^2 = 10$	(3, -1)	$m = -\frac{1}{3}$		
$x^2 + y^2 = 68$	(-2, -8)			
$x^2 + y^2 = 25$	(-4, 3)			
$x^2 + y^2 = 73$	(8, 3)			
$x^2 + y^2 = \frac{53}{2}$	$\left(\frac{5}{2}, -\frac{9}{2}\right)$			
$x^2 + y^2 = 6$	$(-2, \sqrt{2})$			
$x^2 + y^2 = 100$				$y = \frac{3}{4}x - \frac{25}{2}$