WORKSHEET

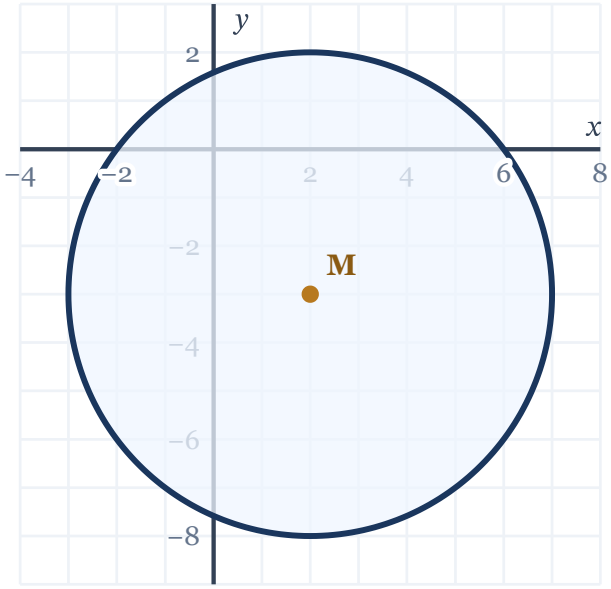
Name: ..... Class: .....

Date: .....

MARK ____ / 18

Answer all questions. Show all your working — marks are awarded for method as well as the final answer.

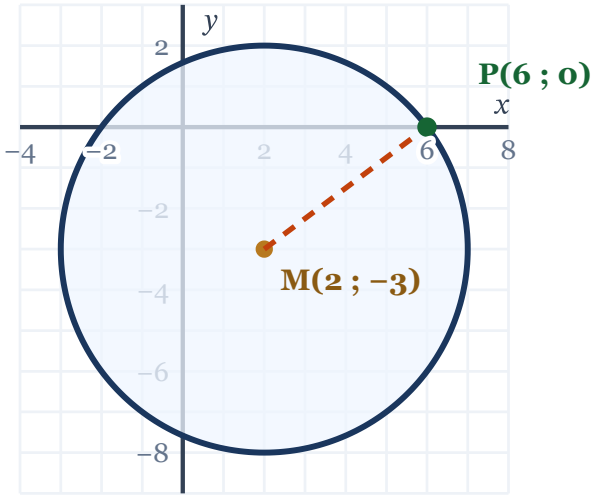
1 Write down the centre and radius of $(x - 2)^2 + (y + 3)^2 = 25$. **(2)**



2 Determine the centre and radius of $x^2 + y^2 - 4x + 6y - 12 = 0$. **(4)**

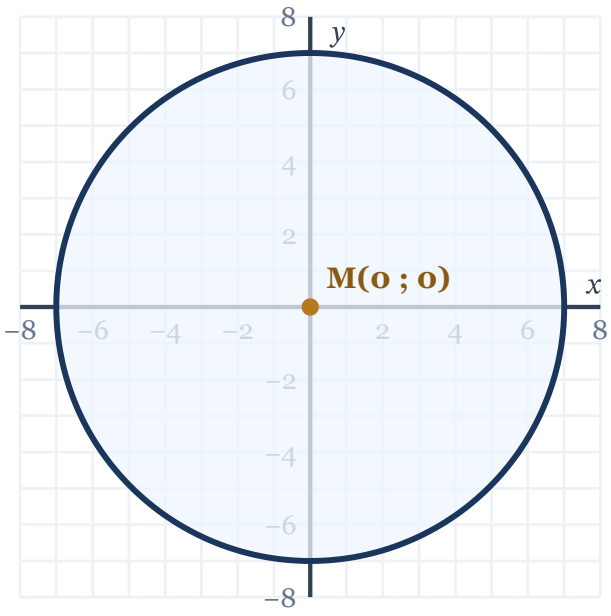
3 Show that P$(6\ ;\ 0)$ lies on the circle $x^2 + y^2 - 4x + 6y - 12 = 0$. **(2)**

4 Determine the gradient of the radius MP where M$(2\ ;\ -3)$ and P$(6\ ;\ 0)$. **(2)**



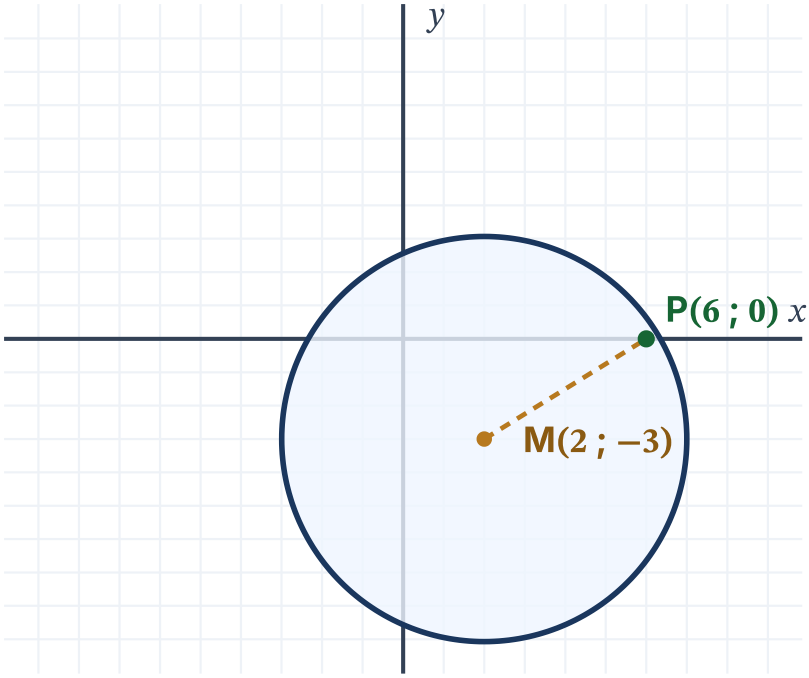
5 Determine the equation of the tangent to the circle at P$(6\ ;\ 0)$. **(3)**

6 Write down the equation of a circle with centre $(0\ ;\ 0)$ and radius 7. **(1)**



7 Determine the radius of $x^2 + y^2 + 2x - 8y + 8 = 0$. **(3)**

8 What is the relationship between a tangent and the radius at the point of contact? (1)



TOTAL: 18 marks

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