Circles and Lines

A circle has centre (5, 3) and radius 5

ATM

Circles and Lines

The equation of a circle is $x^2 + y^2 - 10x - 6y + 9 = 0$

ATM

Circles and Lines

The equation of a circle is $(x - 5)^2 + (y - 3)^2 = 25$

ATM

Circles and Lines

The equation of the tangent to the circle at (2, 7) is $4y = 3x + 22$
The point (5, - 2) lies on the circle

ATM

Circles and Lines

The lines $3y + 4x = 29$ and $4y = 3x - 3$ cut at the centre of the circle.
The point (8, 7) lies on the circle

ATM

Circles and Lines

The line joining the points (1, 6) and (9, 0) is a diameter of the circle

ATM

Circles and Lines

The equation of the normal to the circle at (10, 3) is $y = 3$
The equation of the normal to the circle at (1, 0) is $4y + 3 = 3x$

ATM

Circles and Lines

ATM

Circles and Lines

The points (2, -1), (8, -1) and (9, 6) all lie on the circle

ATM

ATM Unit 7 Prime Industrial Park Shaftesbury Street Derby DE23 8YB Tel. 01332 346599 admin@atm.org.uk www.atm.org.uk