

Circles and Tangents Exam Questions

 Consider the circle with equation x² + y² = 13 sketched below. The point A lies on the circle and has a y-coordinate of 2. The tangent line to the circle at the A intersects the *x*-axis at the point B.

Not Drawn accurately



Find the coordinates of B.

(5 Marks)

Visit <u>http://www.mathsmadeeasy.co.uk/</u> for more fantastic resources.

2. Consider the circle with equation x² + y² = 25 sketched below. The point A Lies on the circle and has a y-coordinate of -4. The tangent line to the circle at A intersects the *y*-axis at the point B.

Not Drawn accurately



Work out the coordinates of B.

(5 Marks)

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3. Consider the circle with equation $x^2 + y^2 = 20$ sketched below. The point A lies on the circle and has a y-coordinate of -4. The point B also lies on the circle and has an *x*-coordinate of $\sqrt{10}$. The tangent line at A intersects the tangent line at B at point C.

Not Drawn accurately



Work out the coordinates of C.

(7 marks)