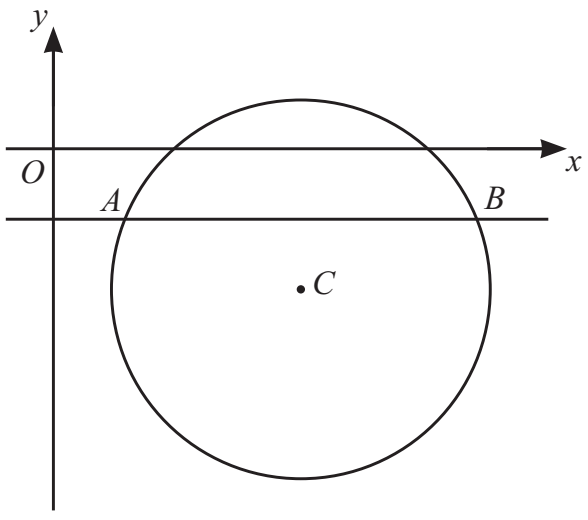
8



The diagram shows the circle with equation $x^2+y^2-14x+8y+36=0$ and the line $y=-2$. The line intersects the circle at the points A and B. The centre of the circle is C.

(a) Find the coordinates of A, B and C. [3]

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(b) Find the angle ACB in radians. Give your answer correct to 3 significant figures. [2]

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(c) The chord AB divides the circle into two segments.

Find the area of the larger segment. [4]

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