7 The point A has coordinates $(-2, 4)$.
The point B has coordinates $(6, 10)$.
The point C has coordinates $(12, 2)$.

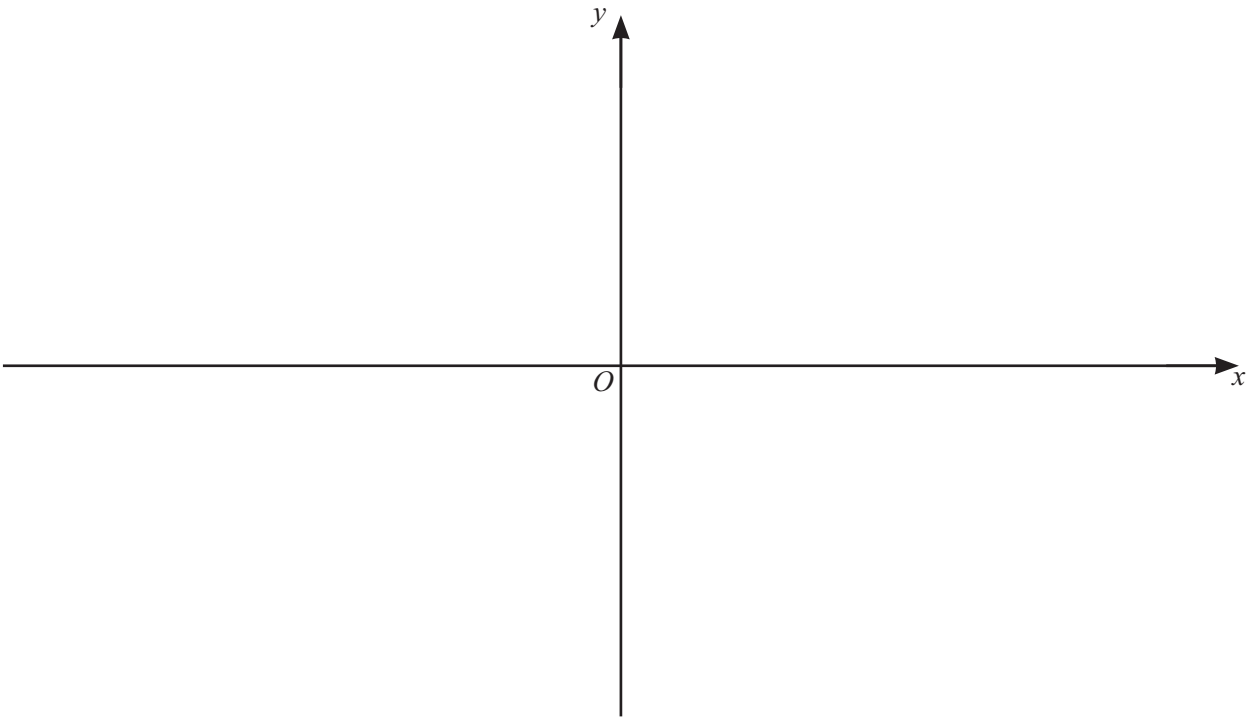
(a) Find the gradients of the lines AB, AC and BC. [2]

(b) Hence find the equation of the circle which passes through the points A, B and C. [4]

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8 On the axes, sketch the graph of $y = 5\ln(4x+3)$.
State the intercepts with the axes.
State the equation of any asymptote.

[4]



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