| 7 | The line l passes through the points with coordinates $(1, 6)$ and $(3, 2)$. | |
|---|---|-----|
| | (a) Show that an equation of l is $y + 2x = 8$ | (3) |
| | The curve C has equation $xy = 8$ | |
| | (b) Show that l is a tangent to C . | (3) |
| | Given that l is the tangent to C at the point A , | |
| | (c) find the coordinates of A . | (2) |
| | (d) Find an equation, with integer coefficients, of the normal to C at A . | (3) |
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| | (Total for Question 7 is 11 marks) | | | |

