

28 The curve C has equation $y = 2x^3 - \frac{21}{2}x^2 + 12x + 5$

The points P and Q lie on C .

P is the point with coordinates $(1, 8.5)$

The gradient of the tangent to C at the point P is equal to the gradient of the tangent to C at the point Q .

Calculate the gradient of the line PQ .
Show your working clearly.

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(Total for Question 28 is 6 marks)

Turn over for Question 29



P 6 8 8 1 7 A 0 2 5 2 8