

9 The equation of a curve  $C$  is  $y = x(2x - 3)(x + 2)$

The point  $P$  lies on  $C$

The  $x$  coordinate of  $P$  is  $a$

Find the range of values of  $a$  for which the gradient of  $C$  at  $P$  is at least  $-2$

Show clear algebraic working.

(7)

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**Question 9 continued**

Handwriting practice area with horizontal dotted lines.

**(Total for Question 9 is 7 marks)**

