

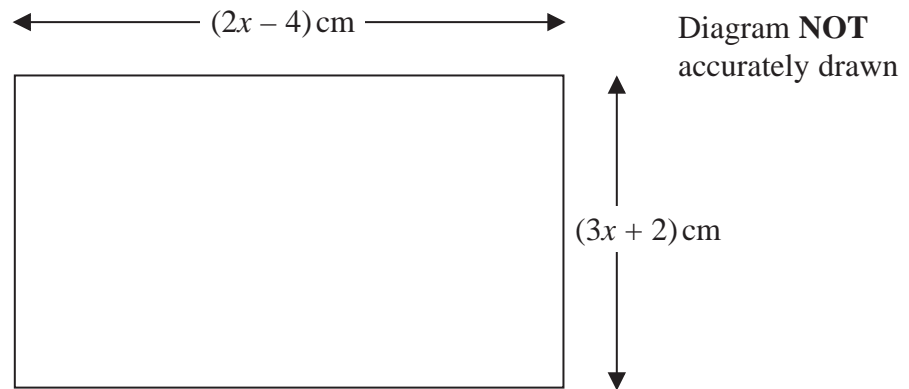
- 1 Curve **C** has equation $y = px^3 - mx$ where p and m are positive integers.

Find the range of values of x , in terms of p and m , for which the gradient of **C** is negative.

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(Total for Question 1 is 4 marks)

2 The diagram shows a rectangle.



The area of the rectangle is $A \text{ cm}^2$

Given that $A < 3x + 27$

find the range of possible values for x .

(Total for Question 2 is 5 marks)

3 (b) Solve the inequality $5y^2 - 17y \leq 40$

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(3)

(Total for Question 3 is 3 marks)

- 4 Solve the inequality $6x^2 + 37x \leq 35$
Show clear algebraic working.

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(Total for Question 4 is 3 marks)
