

5 The equation of a curve is  $y = 2x^2 - \frac{1}{2x} + 3$ .

(a) Find the coordinates of the stationary point. [3]

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(b) Determine the nature of the stationary point. [2]

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(c) For positive values of  $x$ , determine whether the curve shows a function that is increasing, decreasing or neither. Give a reason for your answer. [2]

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