

9 A curve has equation $y = \frac{2x+3}{4x^2+7}$

9 (a) (i) Find $\frac{dy}{dx}$

[2 marks]

9 (a) (ii) Hence show that y is increasing when $4x^2 + 12x - 7 < 0$

[4 marks]

9 (b) Find the values of x for which y is increasing.

[2 marks]