

THINKMATH CHALLENGE 2



Student Name:

Class:

Date:

Mark:

25

Answer ALL questions.

QUESTION 1:

Find the derivative for the following functions.

i) $y = (3x^4)(2x + 5)$ [4 marks]

ii) $y = 5x \cos(3x + 1)$ [4 marks]

iii) $y = \frac{3x^2}{x + 5}$ [4 marks]

iv) $y = \frac{(5x + 7)^4}{\sin(2x)}$ [4 marks]

QUESTION 2:

Find second order differentiation for the following functions:

i) $y = (2x^2 - 1)^3$ [3 marks]

ii) $y = \sin(2x + 5)$ [3 marks]

iii) $y = 5e^{(2x+3)}$ [3 marks]

