PART 1 (Questions 1 to 8)

(66 marks)

Question 1 (7 marks)

Find $\frac{dy}{dx}$ for each of the following. There is no need to simplify your answers.

(a) $y = e^{x^2}$.

(2 marks)

(b) $y = 2x \sin 3x$.

(2 marks)

(c) $y = \frac{4x}{(6-x)^2}$.

(3 marks)