Question 1 (9 marks)

(a) For each of the functions below, determine $f'(x)$. You do not need to simplify your answers.

(i) $f(x) = \left(2x^5 + 7\right)^3$.

(2 marks)

(ii) $f(x) = 3\ln(8x+1) + 9\sqrt{x}$.

(2 marks)

(iii) $f(x) = \dfrac{11 - 5x}{1 + \cos x}$.

(3 marks)