

Question 3

a)

i) $\int (x^8 + 2x^2)(3x^2 + x) dx$
 $\int (3x^{10} + x^2 + 6x^4 + 2x^3) dx$
 $\frac{3x^{11}}{11} + \frac{x^3}{3} + \frac{6x^5}{5} + \frac{2x^4}{4}$

ii) $\int (e^x + 1)(e^x - 1) dx$
 $\int (e^{2x} - e^x + e^x - 1) dx$
 $\frac{e^{3x}}{3} - \frac{e^{2x}}{2} + \frac{e^{2x}}{2} - x - 1$