

Calculus Review Homework #6 due Thursday 10/25/2012
at 2.30pm

Find the following integrals showing all work —

$$\textcircled{1} \int x \sin x \, dx$$

$$\textcircled{2} \int_1^e x^2 \ln x \, dx$$

$$\textcircled{3} \int x^3 e^{2x} \, dx$$

$$\textcircled{4} \int \sec^3 x \, dx$$

$$\textcircled{5} \int \frac{2x^5 + 7}{x^2 + 3} \, dx$$

$$\textcircled{6} \int \frac{x \, dx}{x^2 + 5x + 6}$$

$$\textcircled{7} \int \frac{(x+1) \, dx}{x^3 (x-2)^2}$$