Section 7.2: Integration By Parts

Group work:

Problem 1 Evaluate the following integrals

(a)
$$\int_{1}^{3} x^2 5^x dx$$

(b)
$$\int \arcsin(x) dx$$

(c)
$$\int x^{\frac{5}{3}} (\ln x)^2 dx$$

Problem 2 Evaluate the following integral

$$\int \sin(3x)e^{7x} \, dx$$

 $\textbf{Problem 3} \ \ \textit{Evaluate the following integrals}$

(a)
$$\int x^5 \cos\left(x^3\right) dx$$

(b)
$$\int \cos\left(\sqrt{x}\right) dx$$

(c)
$$\int x \cos x \sin x \, dx$$

Learning outcomes: