

MA205 - Integral Calculus
Lesson 6: The Definite Integral
Board Problems

Compute the following definite integrals, using the Fundamental Theorem of Calculus, Part 2.

$$1. \int_1^2 3 \sin(x) dx$$

$$2. \int_5^{10} \left(\frac{100}{\theta} + 50 \right) d\theta$$

$$3. \int_2^{1000} 10 \sqrt[3]{y} + 15 \cos(y) + \sin(t) dy$$