

7.6 - Integration Using Tables and Computer Algebra Systems

Preparation (Watch at Home)

7.6a

Exercises:

Use a table of integrals to evaluate the integral.

$$\int \frac{\sqrt{2y^2 - 3}}{y^2} dy$$

7.6c

$$\int_0^2 x^3 \sqrt{4x^2 - x^4} dx$$

In-Class Discussion

7.6b

$$\int \frac{\sin 2\theta}{\sqrt{5 - \sin \theta}} d\theta$$

In-Class Practice

Use the Table of Integrals on the reference pages/formula cards in the textbook to evaluate the integral.

1. $\int x \sqrt{2 + x^4} \, dx$

2. $\int_0^{\pi} x^3 \sin x \, dx$

3. $\int \frac{dx}{2x^3 - 3x^2}$

4. $\int e^t \sin(\alpha t - 3) dt$
