Section 8.1

Review of Integration Formulas: See the table on p. 508 (or in the front cover of the book) for a review of all the integration formulas that we have seen so far.

1) Find each integral.

a) $\int \frac{6}{x^2+16} dx$

b) $\int \frac{6x}{x^2+16} dx$

c) $\int \frac{6x^2}{x^2+16} dx$

2) Evaluate the definite integral.

$$\int_0^1 \frac{2x+4}{\sqrt{9-4x^2}} dx$$

3) Find the integral.

$$\int \frac{4x^2}{\sqrt{9-x^6}} dx$$

4) Find the integral.

$$\int \frac{3}{3 + 5e^x}\,dx$$

5) Find the integral.

$$\int \tan x[\ln(\cos x)]\,dx$$

6) Find the integral.

$$\int \cot^2 3x\,dx$$

7) Find the integral.

$$\int \frac{2x - 1}{x^2 - 4x + 29}\,dx$$

Homework for 8.1: #21, 23, 31, 36, 37, 39, 41, 45, 63