

**Practice Problems**

These problems are not to be handed in, but try them first; also try the even problems if you need more practice.

- From §6-2 (pages 370–372): 13–35 odd;
- From §7-3 (pages 436–438): 7–19 odd.

The answers to these should be in the back of your textbook.

**Due Problems**

These problems are due May 17 Thursday.

Evaluate each of the following (definite or indefinite) integrals. If you integrate by substitution, show  $u$  and  $du$ ; if you integrate by parts, show  $u$ ,  $v$ ,  $du$ , and  $dv$ . (In any case, show at least one intermediate step for each.)

**1**  $\int \frac{x}{x^2 + 1} dx$

**2**  $\int te^{4t} dt$

**3**  $\int_1^e 4x \ln x dx$

**4 Extra credit:**  $\int e^{\sqrt{x}} dx$