

Warm-Up Problems  
January 22, 2003

1. Compute the following definite integrals: (use elementary geometric area formulas)

(a)

$$\int_{-1}^3 2u + 3 \, du$$

(b)

$$\int_{-1}^3 2x \, dx$$

(c)

$$\int_{-1}^1 \sqrt{1 - x^2} \, dx$$

(d)

$$\int_0^3 \sqrt{9 - t^2} \, dt$$