

HOMEWORK 10
CALCULUS III
DUE 02-21

Show your work!

(1) (a) Compute the integral

$$\int_0^2 \sqrt{(t+2)^2 - 3} dt$$

by making the substitution $t = \sqrt{3} \sec(\theta) - 2$.

(b) Compute the integral

$$\int \sqrt{a^2 + b^2 t^2} dt$$

by making an appropriate substitution.

- **Eleven** book problems: #11.2.38, 43, 47 (3 problems); #12.5.3, 7, 12, 16, 17 (5 problems); #13.1.16, 17, 23 (3 problems).