

**Math 165: Honors Calculus I**      Name: \_\_\_\_\_  
**Quiz 3** Sept. 22, 1994

1. Define the following:

a) A partition of  $[a, b]$ .

b) A step function on  $[a, b]$ .

c)  $\int_a^b s(x) dx$  where  $s$  is a step function on  $[a, b]$ .

d)  $\int_a^b f(x) dx$  where  $f$  is a bounded function on  $[a, b]$ .

2. State precisely the following theorems about integrals of step functions.

a) Linearity Property.

b) Invariance Under Translation.

3. Compute  $\int_{-2}^4 3[x] + [x/4] dx$ .