

$$\int_0^{\infty} f(x) e^{-x} dx \approx c_1 f(x_1) + c_2 f(x_2), \quad c_1 = \frac{x_2}{4}, \quad c_2 = \frac{x_1}{4}$$

SAY $f(x) = 1$

$$\int_0^{\infty} e^{-x} dx = \lim_{b \rightarrow \infty} \int_0^b e^{-x} dx = -\lim_{b \rightarrow \infty} e^{-x} \Big|_0^b = -\lim_{b \rightarrow \infty} (e^{-b} - 1) = -(0 - 1) = 1$$

$$1 = c_1 f(x_1) + c_2 f(x_2)$$

$f(x) = x$

$$\int_0^{\infty} x e^{-x} dx = -x e^{-x} \Big|_0^{\infty}$$

$u = x \quad dv = e^{-x} dx$
 $du = dx \quad v = -e^{-x}$

29th ANNE, 1:00 PM

WKND GMS CHOOZE

WATCH 4 CUREMS (MED)