Subject: Session 88

Year. Month. Date. ( )

1. a) $\vec{r}(t) = \langle 2t, 4t, 8t \rangle$

$$\int_{t=0}^{t=1} -y\,dx + x\,dy + z\,dz$$

$$\int_0^1 -4t\,dt + 2t\,dt + 8t\,dt$$

$$= -\frac{4t^2}{2}\Big|_0^1 = \frac{6}{2} = 3$$

b) $(2t)$

$$\int_0^2 -t^2\,dt + t\,dt + t^3(3t^2)\,dt$$

$$= \frac{10}{3}4$$

2. $f(1) - f(0) = -1$