

Another practice Quiz problem:

Consider the path  $\sigma(t) = (t, 1 - t^2, \frac{2}{3}t^3)$  for  $0 \leq t \leq 1$ .

a) Reparametrize this path to have the opposite orientation.

b) Calculate  $\int_{\sigma} (xy + yz) ds$ .

c) Calculate  $\int_{\sigma} -z dx + x dz$ .