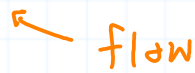


Quiz

1. Calculate the surface area of $S(u,v) = (3u-2v, u+v, 2u+v)$ for $(u,v) \in [0,1]^2$, weighted by $f(x,y,z) = x+z$.
2. Find the flux of $F(x,y,z) = (0, z, y)$ through the surface S from the previous problem.
3. Explain why Stokes' theorem implies that the flux of the curl of a vector field through a surface is given by the circulation of the (original) vector field along the boundary of the surface.  flow

Integral Summary: See handout.