

**Quiz 6      Calculus 3      11/18/2011**

Each problem is worth 5 points. Clear and complete justification is required for full credit.

1. Compute the curl of the vector field  $\mathbf{F}(x,y,z) = \langle x^2y, x^2z, x^3 \rangle$ .

2. Compute the divergence of the vector field  $\mathbf{F}(x,y,z) = \langle x^2y, x^2z, x^3 \rangle$ .

