Quiz 5a   Calculus 3   11/12/2008

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

Let $\mathbf{A}(x, y, z) = \left\langle \dfrac{-z}{x^2 + y^2 + z^2}, 0, \dfrac{x}{x^2 + y^2 + z^2} \right\rangle$.

1. Compute div $\mathbf{A}$.

2. Compute curl $\mathbf{A}$.