5.27 $\quad$ Suppose $A$ is azimuthal, given by

$$
\overrightarrow{\mathbf{A}}=\frac{c}{s} \hat{\varphi}
$$

What can you say about curl(A)?
A) $\operatorname{curl}(\mathbf{A})=0$ everywhere
B) $\operatorname{curl}(\mathbf{A})=0$ everywhere except at $\mathrm{s}=0$.
C) $\operatorname{curl}(\mathbf{A})$ is nonzero everywhere
D) ???

