## Curl and Divergence

## Question

If $f, g$, and $h$ are differentiable functions, which of these vector fields must have constant curl?
A. $(g(y)+2 z) \vec{i}+(f(x)+y) \vec{j}+(h(z)-x) \vec{k}$
B. $(h(z)-x) \vec{i}+(g(y)+2 z) \vec{j}+(f(x)+y) \vec{k}$
C. $(f(x)+y) \vec{i}+(h(z)-x) \vec{j}+(g(y)+2 z) \vec{k}$
D. $(f(x)+y) \vec{i}+(g(y)+2 z) \vec{j}+(h(z)-x) \vec{k}$

