



## Question

For a scalar function  $f$  on  $\mathbb{R}^3$  and a vector field  $\vec{F}$  on  $\mathbb{R}^3$ , which of these quantities is vector-valued?

- A.  $\text{curl}(\nabla f) + f$
- B.  $f \text{div}(\vec{F}) + \nabla f \cdot \vec{F}$
- C.  $\text{div}(f) + \vec{F}$ .
- D.  $\nabla(\|\vec{F}\|^2) + \nabla f$