## Partial Derivatives

## Question

For the function $f(x, y)=e^{x} \sin \left(x y^{2}\right)$ which formula is correct?
A. $f_{x}=e^{x} \cos \left(x y^{2}\right)$
B. $f_{x}=y^{2} e^{x} \cos \left(x y^{2}\right)$
C. $f_{x}=e^{x} \sin \left(x y^{2}\right)+e^{x} \cos \left(x y^{2}\right)$
D. $f_{x}=e^{x} \sin \left(x y^{2}\right)+y^{2} e^{x} \cos \left(x y^{2}\right)$
E. None of the above.

