Partial Derivatives

Question

For the function $f(x, y) = e^x \sin(xy^2)$ which formula is correct?

A. $f_y = e^x \cos(xy^2)$

B. $f_y = 2ye^x \cos(xy^2)$

C. $f_y = 2xye^x \cos(xy^2)$

D. $f_y = e^x \sin(xy^2) + 2ye^x \cos(xy^2)$

E. None of the above.