

Tangent Planes and Linear Approximation



Question

For the function $f(x, y) = xy$, find the equation of the tangent plane to the graph of f at the point $(2, 3)$.

- A. $z - 6 = x(x - 2) + y(y - 3)$
- B. $z - 6 = y(x - 2) + x(y - 3)$
- C. $z - 6 = 2(x - 2) + 3(y - 3)$
- D. $z - 6 = 3(x - 2) + 2(y - 3)$