Tangent Planes and Linear Approximation

Question

Suppose $L(x,y) = -1 + 5(x-2) - 7(y-3)$ is the linearization of $f(x,y)$ at $(2,3)$. The $y = 3$ trace of the graph of $z = f(x,y)$ is a curve. What is the slope of the tangent line to that curve at the point $(2,3,-1)$?

A. -7

B. 5

C. -1

D. There is not enough information to decide.