Suppose $f(x, y)$ has the values given in the table:

$x \backslash y$	2.5	3	3.5	4
1	4.11	4.17	4.21	4.24
1.2	4.09	4.12	4.17	4.20
1.4	4.02	4.08	4.13	4.17
1.6	3.98	4.04	4.10	4.14
1.8	3.92	4.00	4.05	4.08
2	3.84	3.97	4.02	4.03

To approximate $f_x(1.8, 3.5)$, we might use a single difference quotient, across the interval from $(1.8, 3.5)$ to $(2, 3.5)$:

$$f_x(1.8, 3.5) \approx \frac{f(2, 3.5) - f(1.8, 3.5)}{2 - 1.8} = \frac{4.02 - 4.05}{.2} = -0.15 \ .$$

Or we might use the interval from $(1.8, 3.5)$ *backwards* to $(1.6, 3.5)$:

$$f_x(1.8, 3.5) \approx \frac{f(1.6, 3.5) - f(1.8, 3.5)}{1.6 - 1.8} = \frac{4.10 - 4.05}{-0.2} = -0.25 \ .$$

But we usually get a better approximation if we use the average of these two approximations:

$$\begin{aligned} & f_x(1.8, 3.5) \\ & \quad \approx \frac{1}{2}\left(\frac{f(1.6, 3.5) - f(1.8, 3.5)}{1.6 - 1.8} + \frac{f(2, 3.5) - f(1.8, 3.5)}{2 - 1.8}\right) \\ & \quad = -0.20 \ . \end{aligned}$$