

Question #16187

The gradient of a function $f(x, y) = y - xy + 2px + 3qy$ is $\nabla = (-y + 2p; 1 - x + 3q)$. Given, that it is equal to $(-2; 3)$ at point $x=3, y=2$, obtain $-2 + 2p = -2; 3q - 2 = 3$, which gives

$$p=0, q=\frac{5}{3}.$$