

• Deriválás:

1. $f(x, y) = x^2 \sin(x + y), \quad \partial_1 f(x, y) = ?$

2. $f(x, y) = x^2 \sin(x + y), \quad \partial_2 f(x, y) = ?$

3. $f(x, y, z) = x^z e^{xy}, \quad \partial_1 f(x, y) = ?$

4. $f(x, y, z) = x^z e^{xy}, \quad \partial_2 f(x, y) = ?$

5. $f(x, y, z) = x^z e^{xy}, \quad \partial_3 f(x, y) = ?$

6. $f(x, y) = \sqrt[3]{x^2 y^4}, \quad \partial_1 f(x, y) = ?$

7. $f(x, y) = \sqrt[3]{x^2 y^4}, \quad \partial_2 f(x, y) = ?$

8. $f(x, y) = \frac{x^2 y^4}{\ln(x + y)}, \quad \partial_1 f(x, y) = ?$

9. $f(x, y) = \frac{x^2 y^4}{\ln(x + y)}, \quad \partial_2 f(x, y) = ?$

10. $f(x, y) = \frac{1}{(x^2 + y)^4}, \quad \partial_1 f(x, y) = ?$

11. $f(x, y) = \frac{1}{(x^2 + y)^4}, \quad \partial_2 f(x, y) = ?$

• Integrálás:

1. $\int_D f = ?$ ahol $f(x, y) = \frac{1}{(3x - y + 6)^4}, \quad D = [0, 1] \times [1, 2],$

2. $\int_D f = ?$ ahol $f(x, y) = (x - 3y + 1)^2, \quad D = [-1, 1] \times [0, 2],$

3. $\int_D f = ?$ ahol $f(x, y) = \frac{x^2}{y}, \quad D = [0, 1] \times [1, e],$

4. $\int_D f = ?$ ahol $f(x, y) = \cos(2x)\sqrt{y^3}, \quad D = [0, \pi] \times [0, 1],$

5. $\int_D f = ?$ ahol $f(x, y) = e^{y+2} \frac{1}{\sqrt[5]{x^2}}, \quad D = [1, 2] \times [0, 1],$