Quiz 10 (Problems)

- 1. For $f(x, y, z) = 4x^z + z^3 \sin y$ find $\frac{\delta^3 f}{\delta x \delta y^2}$.
- 2. Use partial derivatives to find $\frac{dy}{dx}$ if $4x^2y + 2y^3 = 5x^3y^4$.

Quiz 10 (Answers)

1. (Math-252 Quiz 10)

$$\frac{\delta^3 f}{\delta x \delta y^2} = 0$$

2. (Math-252 Quiz 10)

$$\frac{dy}{dx} = \frac{15x^2y^4 - 8xy}{20x^3y^3 - 4x^2 + 6y^2}$$