QUIZ 2
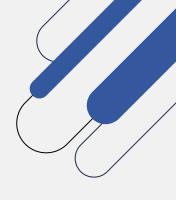
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Study Program: Informatics Engineering 2024/2025

Quiz Duration: 90 mins **(Open Book + Work in Excel)**

Quiz 2

1. Calculate $\int_1^2 (2x^2 - 3x)dx$ using ==Riemann Method==, where n = 10. Then compare the results with the Analytical Method (calculus), calculate the relative error!

2. Calculate the constrained area $\int_0^1 (x^2)dx$ using ==Riemann Method== where h = [0,05]. Then compare the results with the Analytical Method (calculus), calculate the relative error!

3. Calculate $\int_0^1 (3x^2)dx$ using ==Trapezoida Method== where h = 0,1. Then compare it with the Analytical Method (calculus), calculate the relative error!

4. Calculate $\int_0^1 (3x^2)dx$ using ==Simpson 1/3 Method== where h = 0,1. Then compare the results with the Analytical Method (calculus), calculate the relative error!