

Individual Assignment 1 Rubric

This assignment is worth 8% of your grade and will be graded out of 20 points.

Task	Points
Integrand Functions <ul style="list-style-type: none">• <code>`integrand_pi(x)`</code> correctly calculates $1 / (1 + x^2)$• <code>`integrand_second(x)`</code> correctly calculates $10 / (1 + 100x^2)$	2 points total <ul style="list-style-type: none">• 1 point• 1 point
Estimation Functions <ul style="list-style-type: none">• <code>`estimate_pi(num_points)`</code> uses Monte Carlo and <code>`integrand_pi`</code>• <code>`estimate_second_integral(num_points)`</code> uses Monte Carlo and <code>`integrand_second`</code>	6 points total <ul style="list-style-type: none">• 3 points• 3 points
Testing <ul style="list-style-type: none">• At least 3 total test cases using <code>`assert`</code>• Each estimation function tested at least once	4 points total <ul style="list-style-type: none">• 2 points• 2 points
Code Clarity and Comments <ul style="list-style-type: none">• Clear, readable structure and names• Inline comments explain logic	4 points total <ul style="list-style-type: none">• 2 points• 2 points
Documentation <ul style="list-style-type: none">• README Explains what the code does and how to run it• Functions have docstrings	2 points total <ul style="list-style-type: none">• 1 point• 1 point
Version Control <ul style="list-style-type: none">• Descriptive commit messages	2 points total <ul style="list-style-type: none">• 2 points