

# Individual Assignment 1 Rubric

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

Task	Points
<b>Integrand Functions</b> <ul style="list-style-type: none"><li>• <code>`integrand_pi(x)`</code> correctly calculates <math>1 / (1 + x^2)</math></li><li>• <code>`integrand_second(x)`</code> correctly calculates <math>10 / (1 + 100x^2)</math></li></ul>	2 points total <ul style="list-style-type: none"><li>• 1 point</li><li>• 1 point</li></ul>
<b>Estimation Functions</b> <ul style="list-style-type: none"><li>• <code>`estimate_pi(num_points)`</code> uses Monte Carlo and <code>`integrand_pi`</code></li><li>• <code>`estimate_second_integral(num_points)`</code> uses Monte Carlo and <code>`integrand_second`</code></li></ul>	6 points total <ul style="list-style-type: none"><li>• 3 points</li><li>• 3 points</li></ul>
<b>Testing</b> <ul style="list-style-type: none"><li>• At least 3 total test cases using <code>`assert`</code></li><li>• Each estimation function tested at least once</li></ul>	4 points total <ul style="list-style-type: none"><li>• 2 points</li><li>• 2 points</li></ul>
<b>Code Clarity and Comments</b> <ul style="list-style-type: none"><li>• Clear, readable structure and names</li><li>• Inline comments explain logic</li></ul>	4 points total <ul style="list-style-type: none"><li>• 2 points</li><li>• 2 points</li></ul>
<b>Documentation</b> <ul style="list-style-type: none"><li>• README Explains what the code does and how to run it</li><li>• Functions have docstrings</li></ul>	3 points total <ul style="list-style-type: none"><li>• 1.5 point</li><li>• 1.5 point</li></ul>
<b>Version Control</b> <ul style="list-style-type: none"><li>• Descriptive commit messages</li></ul>	1 points total <ul style="list-style-type: none"><li>• 1 points</li></ul>