

YOUR NAME: _____

George Voutsadakis

Read each problem **very carefully** before starting to solve it. Each problem is worth 5 points. It is necessary to show **all** your work. Correct answers without explanations are worth 0 points. GOOD LUCK!!

1. Find the average value of $f(x) = x^3 - 5x^2 + 10$ in $[-1, 3]$.
2. Find the area of the region bounded by the graphs of the functions $f(x) = x^2 - 6x + 4$ and $g(x) = -x^2 + 4$.