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 $f(x) = \frac{1}{\sqrt[3]{x}}$ on the interval [1, 8].

2. Find the area of the region enclosed by the graphs of $f(x) = x^2 - 2x + 5$ and g(x) = 4x.

