Name: _____   Date: _____

To receive any credit for the following problems, you must show complete and accurate work. Use proper limit notation and give exact answers unless otherwise noted.

1. Determine the average value of $f(x) = 6x^2 + 10x - 1$ on the [-1, 3]

2. Use symmetry to evaluate $\int_{-4}^{4}(8x^{11} - \sin(x) + 9x^2 + 5)\,dx$

3. Determine the point(s) where the average value of $f(x) = \frac{1}{x}$ is equal to $f(x)$ on [1, 4]