

NAME:

1. Suppose that $\int_1^3 f(x)dx = 3$ and $\int_1^3 g(x)dx = 1$. Find the value of the definite integral $\int_1^3 [f(x) + 2g(x) + 1] dx$.

2. Use the midpoint rule with $n = 4$ to approximate the value of the definite integral $\int_{-4}^4 \frac{1}{1+x^2} dx$.