

NAME _____

SECTION _____

1. Compute $\int_1^2 \frac{3x^2 + 5x - 1}{x^2} dx$.

2. Find the arc length of $y = \left(\frac{x}{2}\right)^4 + \frac{1}{2x^2}$ over $[1, 4]$. *Hint* Show that $1 + (y')^2$ is a perfect square.