Quiz 2

Name: _____

Answer all questions in a clear and concise manner. Unsupported answers will receive *no credit*.

1. Find the area under the graph of xe^{2x} between $x = 0$ and $x = 1$.

2. Find the form of the partial fractions decomposition of

$$\frac{3x^3 + 2x + 1}{x^4 - 16}.$$

You **do not** need to solve for the coefficients. Hint: $x^4 - 16$ is a difference of squares $(x^2 - 4)(x^2 + 4)$.