The two integrals on this quiz must be computed by hand with sufficient work shown.

1. (4 points) Evaluate \( \int \frac{5x^2 + 10x - 5}{(x + 2)(x^2 + 1)} \, dx \).
2. (4 points) Evaluate \( \int \frac{3x + 7}{x^2 + 4x + 3} \, dx \).

3. (2 points) Using the constants \( A, B, C, D, \ldots \), show the form of the partial fraction decomposition for the following rational function. Do not solve for the constants and do not evaluate an integral.

\[
\frac{2x + 5}{(x + 2)(x - 1)^3(x^2 + 1)^2} =
\]