1. (5 points) Show your work. Partial credit may be awarded. Compute the antiderivative

\[
\int \frac{x \left( x^3 - 2x^2 + x \right) + 2}{x^3 - 2x^2 + x} \, dx
\]
2. (5 points) Show your work. Partial credit may be awarded. Compute the antiderivative

\[ \int \sqrt{5 - x^2} \, dx \]  

(1)