Q1. Find \( \int \frac{x^2}{\sqrt{1-x^3}} \, dx \)

Q2. Consider a region in the first quadrant that is bounded above by \( y = \sqrt{x} \) and below by the x-axis and the line \( y = x - 2 \). Set up two integrals (one with respect to x and other with respect to y) which determine the area of the above region.