MATH 2300-015 QUIZ 3 Pt. 1

Name: _____

1. Computer the following integral in two ways (substituting $u = 1 - x^2$ and $x = \sin \theta$):

$$\int \frac{x^3}{\sqrt{1-x^2}} dx$$

2. Use integration by parts to reduce $\int x^2 \arcsin x \, dx$ to the integral in problem 1.