

**137.** You are given the following three observations:

$$0.74 \quad 0.81 \quad 0.95$$

You fit a distribution with the following density function to the data:

$$f(x) = (p+1)x^p, \quad 0 < x < 1, \quad p > -1$$

Determine the maximum likelihood estimate of  $p$ .

- (A) 4.0
- (B) 4.1
- (C) 4.2
- (D) 4.3
- (E) 4.4