Problem 4: Which Exponential is Larger?

Determine, using Calculus not calculators or any technology, which number is larger π^3 or 3^π

As always, show your work, fully explain and justify your answer.

Posting Date 2/20/2017. Submit solutions to Noah Aydin, Mathematics Department, RBH 319 (e-mail or hard-copy, but hard copy submissions must include a time stamp) by 4 pm on 3/3/17.