

Name: _____

Show all work, clearly and legibly, to receive full credit. Correct spelling, organization of your solution, and proper use of mathematical notation all count. You may use a stand-alone graphing calculator, but not any internet-based calculators. No notes, books, or other additional resources are permitted. Good luck!

1.) (5 pts.) Use the IVT to show that $f(x) = x^5 + x^3 - 5x + 2$ has a root (that is, takes on the value 0) for some x in the interval $[0, 1]$.

2.) (5 pts.) In the statement “If it’s raining, then it’s cloudy”, which part is the hypothesis, and which part is the conclusion?