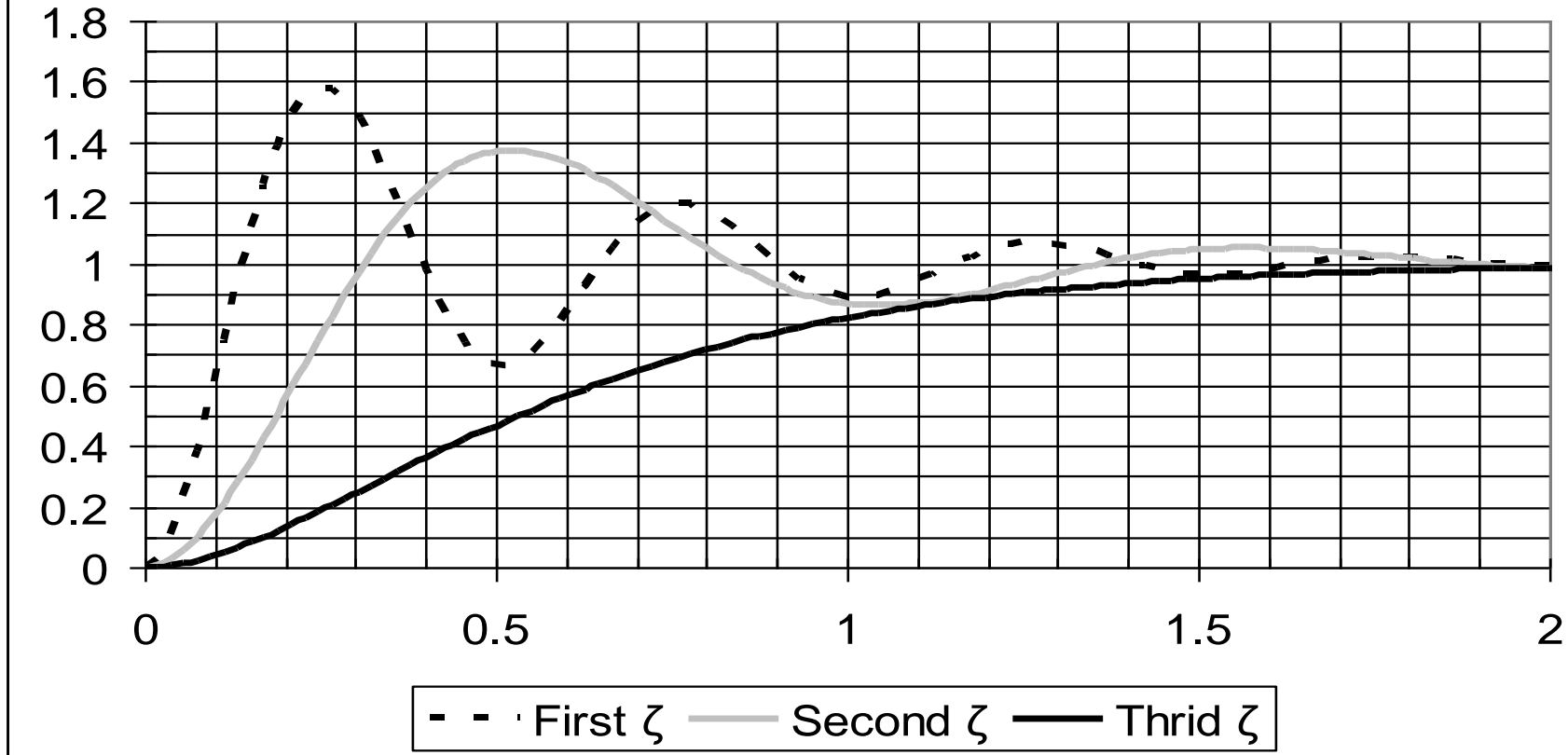


Second Order System Reponse to a Unit Step Input Function



1. Which of the above second order systems has the shortest settling time?
 - a. First
 - b. Second
 - c. Third

2. What is the confidence interval, CI , for a 3rd order polynomial fit with 90% certainty of a 12 point calibration data set? $y_c = \sum_{i=0}^3 a_i x^i \pm CI (90\%)$
- $\pm(t_{8,90}S_x)$
 - $\pm(t_{8,90}S_{xy})$
 - $\pm(t_{8,90}S_{xy}/\sqrt{12})$
 - $\pm(t_{9,90}S_{xy})$
 - None of the above
3. A "U" tube manometer is a "null device".
- True
 - False
4. The static sensitivity of a elastic deflection transducer is directly proportional to the transducer input impedance.
- True
 - False

