

Sample test 1; Most of the solutions will be posted before Thursday at /cise/class/cot4501fa00/SOLUTIONS. One selection from each item below will be discussed Thursday Oct. 5

Use vectorized matlab operations whenever possible. You lose points whenever a loop is used unnecessarily.

Answer all questions: each is worth 50 points

The test is openbook and open notes

1. (50 points, compulsory) Will be patterned after one of: Problems 2.1.1, 2.1.3, 2.1.4 (and the analogous version for the BB-form);
2. (50 points, compulsory) Will be patterned after one of: 2.2.1 (and the analogous conversion from BB-form to power form), 2.2.2, 2.2.5;
3. (50 points, compulsory) Will be patterned after one of: 3.1.8, 3.2.2, 3.2.4;
4. (50 points, compulsory) Will be patterned after HW2, Pbm 4, where you do NOT require second derivative continuity at the breakpoints (these are called C^1 cubics); or and HW2 Pbm 4, where you use quartics (degree 4 polynomials) instead of cubics (instability problems will disappear).
5. (50 points, compulsory) Will be patterned after one of: 4.1.2; 4.2.3; 4.3.1;