

18.100A Fall 2012: Assignment 24 due Mon. Dec.3

As before, list collaborators, if any; it's illegal to consult assignment solutions from previous semesters.

Reading: 26.2-3; 21.3 Leibniz' formula, Fubini's theorem. Gamma function.

1. (1) Work 26.2/2 .
2. (2) Work 26.2/5 . Don't forget the initial conditions.
3. (1) Work 26.3/1 .
4. (2) Work 26.3/2 .
5. (2) Work Questions 21.3/1,2 ; if possible without consulting the solutions.
6. (2: .5, 1.5) Work 21.2/5ab .

For (b), look first for a simple non-negative discontinuous function which has the other desired properties, then alter it so as to make it continuous without destroying its other desired properties; then finally alter it again to make it positive, still retaining the other desired properties.