

Physics 129a  
Problem Set Number 5  
Due Wednesday, November 3, 2009

Reading: Course note on “Distributions”.

19. Exercise on linear operators in finite-dimensional Euclidean space: Exercise 6 in the Hilbert Spaces course note.
20. Exercise on operators: Exercise 7 in the Hilbert Spaces course note.
21. Exercise on delta functions: Exercise 1 in the Introduction to Distributions course note.
22. Exercise on singularities in our test functions: Exercise 2 in the Introduction to Distributions course note.
23. Some more  $\delta$ -functionology: Exercise 3 in the Introduction to Distributions course note.