

## Homework 2

Due Date: April 26, 2006

Points: 100

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1. (20 points) Text, §3.9, problem 4.
2. (10 points) Text, §3.9, problem 5.
3. (20 points) Prove that  $\tau(\sigma(\mathbf{X})) = \tau(\mathbf{X})$  using Definition 3—21.
4. (10 points) Text, §3.9, problem 7.
5. (20 points) Text, §3.9, problem 9.
6. (5 points) Text, §4.11, problem 1.
7. (15 points) Text, §4.11, problem 10.

### Extra Credit

1. (30 points) Text, §3.9, problem 10.