Math 2001 Assignment 25

Your name here

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Problem 1. Scheinerman, §14, #13

Problem 2. Scheinerman, §14, #14

Problem 3. Scheinerman, §14, #16

Problem 4. Let $A = \mathbb{R} \times \mathbb{R}$. For $(a, b), (c, d) \in A$, declare that $(a, b) \leq (c, d)$ if $a \leq c$ and $b \leq d$.

(i) Describe the relation $\leq$ on A as a set of ordered pairs.

(ii) Prove that $\leq$ is a partial order on A but that it is not a total order.

Problem 5. Scheinerman, §15, #3. No justification required.