

ASSIGNMENT #1

(All Problems Due **Friday 9/12/01.**)

Section 1.4, # 19a.

Section 3.1, # 1.

Section 3.1, # 2.

Section 3.1, # 3.

Section 3.1, # 4.

Section 1.2, # 6.

Section 1.3, # 9.

Section 1.3, # 14.

Section 1.3, # 16b.

Additional I. Suppose \mathcal{A} is a σ -algebra of subsets of Y . Suppose $f : X \rightarrow Y$ and define

$$B = \{f^{-1}(E) : E \in \mathcal{A}\}.$$

Show B is a σ -algebra of subsets of X .

Note. The problems from sections 1.2 and 1.3 are review, and can be started immediately.