Problem Set 6 - Do for Monday Nov. 6

Folland, p.27: # 8*, #12, #14*, #15(a)*, p. 32: #18*, #24, p. 39: #29*

Also: 1* Prove that if $\mathcal{M}$ is a $\sigma$-algebra on any set $X$, then either $\mathcal{M}$ is finite or $\mathcal{M}$ is uncountable.

Hint: The set of all subsets of an countably infinite set is uncountable.