Tutorial 8–9, additional questions:

Q1: (a) Show that $PSPACE^{PSPACE} = PSPACE$.

(b) Show that $BPP^{BPP} = BPP$.

Q2. Consider the following variation of the class PP. We define the class PP'' as follows. L is in PP'', iff there exists a polynomial time bounded probabilistic turing machine M such that, $x \in L$ iff $Prob_M(x) > 1/4$.

Show that $PP = PP''$.