1. In this exercise we use the setting of Exercise 2, Section 3.7 (page 52–53 of the text). Consult the solution of Exercise 3 on Homework 7 for a description of an Equivalent Martingale Measure $P^*$. 

(a) Use $P^*$ to compute the time $t$ price $C_t$ of the European call option with payoff $(S^1_t - 6)^+$ for $t = 0, 1$. 

(b) Now use $P^*$ to compute the time $t$ price $P_t$ of the European put option with payoff $(6 - S^1_t)^+$ for $t = 0, 1$. 

(c) Confirm the call-put parity relationship $C_t - P_t = S_t - 6$ for $t = 0, 1$. 

2. In this exercise we also use the setting of Exercise 2, Section 3.7 (page 52–53 of the text). In Homework 7 you saw that this model admits an Equivalent Martingale Measure. This market is therefore viable, by the First Fundamental Theorem of Asset Pricing. Is this market complete? 

3. Exercise 3, Section 3.7 (page 53 of the text).