## Chapters 9 and 10 Homework

## 2 December 2021

For the Chapters 9 and 10, homework I want you to do the following:

- Do problem 9.3.1 (pg. 363).
  - After completing the problem using the expected values, use some other criterion to make your decision tree. Defend your choice.
- Do problem 9.3.2 (pg. 364).
  - As with the first problem, use some other criterion to make your decision tree after completing the problem using the expected values. Defend your choice.
- Do problem 9.3.5 (pg. 364).
- Consider the following 3-person total conflict game involving Eddie, Sara, and Tony, where each playing can play one of two strategies: (1) or (2). Payoffs are given in Tables 1 & 2 as (Eddie, Sara, Tony). Solve for the optimal strategy for each player!

Table 1: Payoffs assuming Tony plays strategy (1)

	Sara (1)	Sara (2)
Eddie (1)	(1,1,-2)	(-4,3,1)
Eddie(2)	(2,-4,2)	(-5,-5,10)

Table 2: Payoffs assuming Tony plays strategy (2)

8 7 1			
		Sara (1)	Sara (2)
	Eddie(1)	(3,-2,-1)	(-6,-6,12)
	Eddie (2)	(2, 2, -4)	(-2,3,-1)

Let me know if you have questions. This assignment is due Thursday, 9 December.