

Name:

Date: Friday, November 4, 2016

MATH 181 F1 Quiz #9

Directions: You have 15 minutes for this quiz. Please write clearly and justify your answers.

Consider the following total conflict game. Players A and B are each given a deck of cards. On each turn they will reveal either a black card or a red card.

If the cards match then Player A wins, and if they do not match then Player B wins. Player A wins \$5 if they are both red and \$10 if they are both black. Player B wins \$12 if Player B plays black and Player A plays red and \$3 if Player A plays black and Player B plays red.

Fill in the pay off matrix below for this game.

Fill in the minimum values for Player A and the maximum values for Player B .

		Player B		
		Black	Red	min
Player A	Black			
	Red			
		max		—

Let us suppose that they are only going to play one round and each player is afraid of risk (and will therefore use the Maximin/Minimax Strategy).

What strategy will Player A use?

What strategy will Player B use?

Who wins?