"Get Together Gone Wrong"

After n long years, a group of friends decided to have a luxurious vacation in a sophisticated hotel. On the last day of the 3-day getaway, they are free to do anything they want (me-time).

Kate and Riley went to a nearby farm and harvest some of the crops there.

Reuben and Thomas played golf separately and on a different golf course.

Later on in the afternoon, Reuben decided to play scrabble with Riley and Libby.

The others spent their day in their room or in the lounge.

As they were called for their last dinner in the hotel, they realized that Brett was missing. They found him lying on the floor with a gun shot. Except from the muddy footprints found at the entrance of his room, no other evidence was found.

They contacted you to solve the crime since you are the famous detective <just insert your name here>.

Here are the list of all the guests in the hotel and the rooms where they stayed during their vacation. Note that they decided to stay in twin bedrooms so two guests are staying in a room. We also know that three of them owns gun and carried them in this trip.

```
/* Facts */
man(brett).
man(riley).
man(reuben).
man(thomas).
woman(libby).
woman(pamela).
woman(andrea).
woman(kate).
victim(brett).
play_scrabble(reuben).
play_scrabble(riley).
play_scrabble(libby).
harvest(kate).
harvest(riley).
play_golf(thomas).
play_golf(reuben).
```

```
smoker(andrea).
smoker(reuben).
smoker(kate).
smoker(brett).
smoker(libby).
room(rm_701).
room(rm_702).
room(rm_703).
room(rm_704).
room(rm_705).
lodge(brett,rm_702).
lodge(riley,rm_704).
lodge(andrea,rm_701).
lodge(reuben,rm_704).
lodge(thomas,rm_702).
lodge(libby,rm_703).
lodge(pamela,rm_701).
lodge(kate,rm_703).
gun_owner(riley).
gun_owner(reuben).
gun_owner(pamela).
```

The clues in finding the suspect are as follows (create rule/s for each clue):

Clue	Name of Rule	Points
1. The suspect can be a man or a woman but the		
suspect cannot be the victim.	suspect(X)	20pts
2. Any suspect who played scrabble at the time of the		
crime has a valid alibi.	has_alibi(X)	15pts
3. Anyone who went to the farm, who smoked or		
played golf went out at least once througout the day.	went_out(X)	15pts
4. Roommates are anyone who shares the same		
room.	roommates(X,Y)	20pts
5. People who has access to a gun are those who		
owns a gun or share a room with another guest who		
owns a gun.	has_access_gun(X)	20pts
6. To find the culprit, we need to find a suspect who		
went outside (because of the mud) and who has no		
alibi and who has access to the gun.	culprit(X)	10pts

Good luck Detective!!!