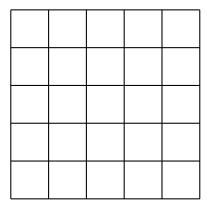
WELCOME AND INTRODUCTION:

- 1) Greet my name my role go around table name and how long tutoring
- 2) Explain training our training involves a wide variety of problems, and there are many intended outcomes for these trainings, some of which are overt (i.e. there are specific skills or tools you will learn and be able to use directly and to pass on to students others are more subtle and are intended to stretch you mathematical in fun ways and in order to make you mentally stronger and some is just to open your eyes to things you may not have seen or thought of before mention competition, but we'll talk about that at the end of this session
- 3) Hand out schedule and mention one date conflict (October 15)
- 4) Take Role and pictures (in order for matching?)

OPENING PROBLEMS:

Problems 1, 2 and 6 of Session 1, handout 1 (can be linked to on computer) - distinguish between problems and exercises - break out of "tunnel vision"

1. How many squares of any size are there in the diagram below?



- 2. How many squares of any size are there on a chessboard?
- 6. The Hawaiian Language is said to be very musical, probably because its alphabet contains only 12 letters. List these 12 letters.

SEMESTER GAME:

The Twenty-One Game (and extension) - see handout

CLOSING REMARKS:

Ask about interest level in competition - we used to have a lot of interest, but for some reason that has dropped off in recent years - should I enter us in this competition? It would probably be a two-hour commitment on a Saturday in the middle of the semester - show on screen what competitions look like - mention prize money and that you would have to prep. Do you have questions for me in general?

TWENTY-ONE PLUS



Most or all of us probably remember some letter or number games from childhood. Perhaps you remember games from long car trips like finding all the letters of the alphabet on signs or license plates or games you might hear on the playground like "eenie-meenie-minie-moe" or "I one it, I two it . . . I jumped over it and you ate it!" One such counting game has the following rules:

This is a two person game, and the winner is the person who says "21." We start with the number 1, and each of us can count one or two or three numbers at a time."

Play this game a number of times over the next few weeks (you might want to keep a record of which numbers each player says), think about strategy as you play, and then answer the following questions:

- 1. Is there a strategy that will allow you to win every time? If so, how?
- 2. Can you win this game in general even if you are counting to a number other than 21 and/or can count by groups of more or less than three numbers?



At a future meeting this semester we will discuss strategies you've come up with.

FALL 2015 SEMESTER SCHEDULE FOR MATH TRAINING MEETINGS

All meetings will be on Thursdays from 3:00pm to 4:30pm. When we are meeting math tutoring is closed in the center "for training," so even if you are scheduled to work then, come to the meeting. This is part of your work, so these hours do count for you, and you are paid for being at the training.

There is one training that conflicts with one of the trainings you do with Shirley; this is the training on October 15, so for that week you'll need to attend her Friday training instead of her Thursday training. If you have a conflict - such as a class scheduled at the same time as these meetings - you will need to contact me to set up a time when we can meet one-on-one to cover the concepts. My email address is meyerh@mjc.edu, and my office phone number is (209) 575-7832

- Meeting 1: Thursday, September 10
- Meeting 2: Thursday, October 1
- Meeting 3: Thursday, October 15
- Meeting 4: Thursday, October 29
- Meeting 5: Thursday, November 12