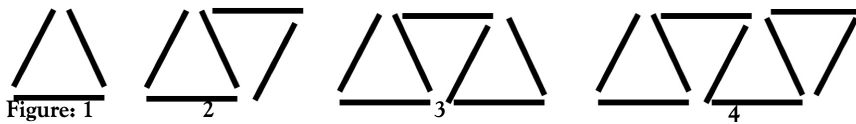


Quiz 1

This is a two-stage quiz. During the first stage, use your knowledge & calculator to take this quiz. You have 15 min. In the second stage, you are now welcome to use your books, notes, and students in the class to retake the same quiz. You have 15 min. to write one solution (with everyone's name on it!!!) to be turned in for the group.

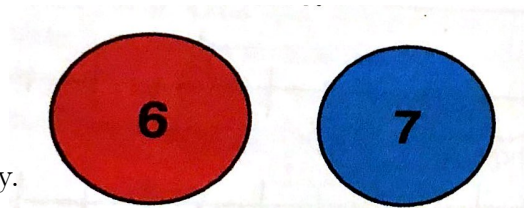
Show your work as you would for a colleague. Partial credit requires reasonable support.

1. [3] Ryan is building a toothpick sequence as shown below. Which figure did he use 15 toothpicks in? Make sure to provide a bit of reasoning/justification for your answer.



2. Two circular cardboard disks each have a one digit number written on the front and back sides. The front of the numbers are shown here.

By tossing both disks and adding the numbers that show face up, we can obtain the totals: 12, 13, and 14.



- (a) [3] Could the back of the red 6 disk have a 9 on it? Justify your answer briefly.

- (b) [4] What kind of strategy (eg. drawing, table, guessing & checking, models, work backwards, etc) might you use to try to solve this problem? Briefly start so the strategy can be easily seen. (Note, the *answer* does not need to be found, just the set up for the strategy work!)