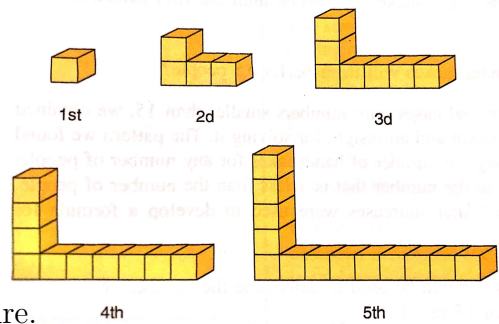# Quiz 2

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.

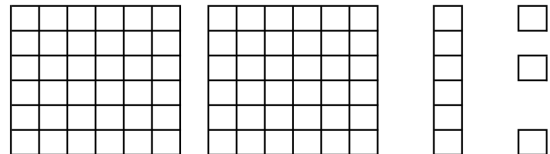1. [3] Consider the following sequence of figures:

    (a) [2] What type of sequence (arithmetic, geometric, recursive, or none of these) is formed by the number of cubes in successive figures? Briefly justify yourself.

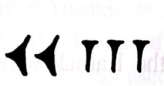   (b) [3] Find the number of cubes in the 10th figure.

2. Consider the number represented with 2 flats, 1 long, and 3 units shown below.
    (a) [2] Write the number of units in the positional notation for the given base.

    (b) [3] Translate the above number into another number system (Hindu-Arabic, Roman, Egyptian, Babylonian, a different base, etc). Clearly indicate which system.

1,000,000	100,000	10,000	1000	100	10	1
Astonished man	Tadpole	Pointing finger	Lotus flower	Coiled rope	Heel bone	Stick

Egyptian Symbols

I	V	X	L	C	D	M
1	5	10	50	100	500	1000

Roman Numerals

23	6	40	59

Babylonian