Logic Quiz

Read the instructions and solve the puzzle.

Example

2	4	6	8	9	7	5	3	1
0	1	2	3	4	5	6	7	8

There are 9 boxes in the figure above, numbered 0 through 8. Box 0 contains the number 2. Box 1 contains the number 4. Below is a list of instructions. Each instruction has a number. Always start with instruction 1 and follow the instructions in numeric order unless directed to go to another instruction. Continue until you are directed to stop.

1. Add 3 to the contents of box 6 and place the result in box 6.
2. Subtract the contents of box 0 from the contents of box 6 and place the result in box 6.
3. Subtract 1 from the contents of box 7 and place the result in box 7.
4. If the contents of box 7 is zero, goto instruction 6.
5. Go to instruction 1.
6. Stop and indicate the contents of box 6: _____

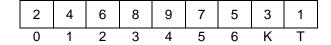Do not turn the page until directed to continue.

Problem 1

2	4	6	8	9	7	5	3	1
0	1	2	3	4	5	6	7	8

1. Copy the contents of box 1 to box 3.
2. Copy the contents of box 2 to box 1.
3. Copy the contents of box 3 to box 2.
4. Stop and indicate the contents of box 1 _____ and box 2 _____

What does this program do to boxes 1 and 2?

Problem 2

2	4	6	8	9	7	5	3	1
0	1	2	3	4	5	6	K	T

1. Place a 0 in box T.
2. Place a 0 in box K.
3. If the contents of box K is less than 3, go to instruction 5.
4. Go to instruction 8.
5. Add the contents of the box whose address is in box K to the contents of box T and place the result in box T.
6. Add 1 to box K and place the result in box K.
7. Go to instruction 3.
8. Stop and indicate the contents of box T: _____

What does the final number in box T represent?