TPS Activity 1:

1. A function is something that takes in inputs and returns one or more values. A procedure does not return a value rather you can say that it causes side effects those being mutating an input parameter. A method is a function almost exclusively in object orientated programming, furthermore it closes over a set of variables, taking in 0 or more input parameters, has access to this set of variables and returns 0 or more values.
2. No Question
3. No question
4. The j SUM label is on line 12 and it tells the computer to jump to another part of the program that isn’t the next line after 12. So from line 12 it jumps to 20.
5. J can be used but a label will have to be created and placed on the line after j sum
6. The return address should be saved before the call to jump so line 11. The address is saved to register v0 and the value of address being saved here is 0 which makes no sense
7. Tries to access a part it can not. We get invalid program counter value: 0X00….
8. 0x00400020
9. 0x00400028, because lui and ori are added instructions by the mips compiler
10. The address changed to the current line+2 and the output is 15
11. We should use jal to call the operator
12. No question

TPS Activity 2:

1. The output will be 38
2. No question
3. Sum knows where to return to because of the jal function that which jumps and links which also occurs with sub. At the end of SUM: jr ra returns the address back to main where it left off when SUM was called. After sub is called the return address is returned to the line after sum.
4. No question
5. S0 is updated with the new value obtained from line 25 where it was updated to a new value. It’s a problem because its returned to main leading to the print out something different from 38