Problem 1

Test Scenarios:

- Integer Inputs
    1. No integers given
        a. (=> !0, → NOT ENOUGH INPUT)
    2. Only 1 integer given
        a. (=> !0, → NOT ENOUGH INPUT)
    3. 1 positive integer given
        a. (=> !0, → NOT ENOUGH INPUT)
    4. 1 negative integer given
        a. (=> !0, → NOT ENOUGH INPUT)
    5. Input 1 is positive && Input 2 is positive
        a. (=> !0, → NOT ENOUGH INPUT)
    6. Input 1 is positive && Input 2 is negative
        a. (=> !0, → NOT ENOUGH INPUT)
    7. Input 1 is negative && Input 2 is positive
        a. (=> !0, → NOT ENOUGH INPUT)
    8. Input 1 is negative && Input 2 is negative
        a. (=> !0, → NOT ENOUGH INPUT)
    9. More than 2 positive integers given
        a. (=> !0, → ?)
    10. More than 2 negative integers given
        a. (=> !0, → ?)

- Non-Integer Input Combinations
    1. Input 1 is not an integer && No input 2 given
        a. (=> !0, → BAD INPUT)
    2. Input 1 is not an integer && input 2 is a positive integer
        a. (=> !0, → BAD INPUT)
    3. Input 1 is not an integer && input 2 is a negative integer
        a. (=> !0, → BAD INPUT)
    4. Input 2 is not an integer && Input 1 is a positive integer
        a. (=> !0, → BAD INPUT)
    5. Input 2 is not an integer && Input 1 is a negative integer
        a. (=> !0, → BAD INPUT)
    6. Both inputs 1 and 2 are non-integers
        a. (=> !0, → BAD INPUT)
    7. More than 2 non-integers given
        a. (=> !0, → BAD INPUT)

- Out of Scope
    1. Input 1 is less than -512 && Input 2 is a positive integer
        a. (=> !0, → TOO BIG)

2. Input 1 is less than -512 && Input 2 is a negative integer
    a. (=> !0, → TOO BIG)
3. Input 1 is less than -512 && Input 2 is a non-integer
    a. (=> !0, → TOO BIG)
4. Input 1 is less than -512 && Input 2 is not given
    a. (=> !0, → TOO BIG)
5. Input 1 is greater than 512 && Input 2 is a positive integer
    a. (=> !0, → TOO BIG)
6. Input 1 is greater than 512 && Input 2 is a negative integer
    a. (=> !0, → TOO BIG)
7. Input 1 is greater than 512 && Input 2 is a non-integer
    a. (=> !0, → TOO BIG)
8. Input 1 is greater than 512 && Input 2 is not given
    a. (=> !0, → TOO BIG)

9. Input 2 is less than -512 && Input 1 is a positive integer
    a. (=> !0, → TOO BIG)
10. Input 2 is less than -512 && Input 1 is a negative integer
    a. (=> !0, → TOO BIG)
11. Input 2 is less than -512 && Input 1 is a non-integer
    a. (=> !0, → TOO BIG)
12. Input 2 is greater than 512 && Input 1 is a positive integer
    a. (=> !0, → TOO BIG)
13. Input 2 is greater than 512 && Input 1 is a negative integer
    a. (=> !0, → TOO BIG)
14. Input 2 is greater than 512 && Input 1 is a non-integer
    a. (=> !0, → TOO BIG)

15. Input 1 and Input 2 are both less than -512
    a. (=> !0, → TOO BIG)
16. Input 1 and Input 2 are both greater than 512
    a. (=> !0, → TOO BIG)

Problem 2

If this were an assignment given to me in the real world, with real world implications, I would probably contact my supervisor and get a clearer understanding of what the expectations are. It might be a waste of company time to check this particular case. However, for this assignment, I will be checking what happens if more than 2 integers are given. It (the number of inputs provided) is a reasonable dimension that may be pushed accidentally during its use, and thus it would be beneficial to have an expectation of (and perhaps change) the behavior in such a scenario.