

# Java Loops

In this problem you will test your knowledge of Java loops. Given three integers  $a$ ,  $b$ , and  $n$ , output the following series:

$$a + 2^0b, a + 2^0b + 2^1b, \dots, a + 2^0b + 2^1b + \dots + 2^{n-1}b$$

## Input Format

The first line will contain the number of testcases  $t$ . Each of the next  $t$  lines will have three integers,  $a$ ,  $b$ , and  $n$ .

*Constraints:*

$$0 \leq t \leq 500$$

$$0 \leq a, b \leq 50$$

$$1 \leq n \leq 15$$

## Output Format

Print the answer to each test case in separate lines.

## Sample Input

```
2
0 2 10
5 3 5
```

## Sample Output

```
2 6 14 30 62 126 254 510 1022 2046
8 14 26 50 98
```

## Explanation

In the first case:

```
1st term=0+1*2=2
2nd term=0+1*2+2*2=6
3rd term=0+1*2+2*2+4*2=14
```

and so on.