Chef is watching TV. The current volume of the TV is X. Pressing the `volume up` button of the TV remote increases the volume by 1 while pressing the `volume down` button decreases the volume by 1. Chef wants to change the volume from X to Y. Find the minimum number of button presses required to do so.

X -> 20

Y -> 35

```
pseudo:  20          15        o/p: 5
int x = s.nI();   y = s.nI();

int c = x-y;  //
int d = y-x;  // -5
if (        ) {
  sout(d);
}
```

```
pseudo:  20          20        o/p: 0
int x = s.nI();   y = s.nI();

if(x > y){
  int c = x-y;
  sout(c);
}else {
  int c = y-x ;
  sout(c);
}
```

There are two problems in a contest.

- Problem A is worth 500 points at the start of the contest.
- Problem B is worth 1000 points at the start of the contest.

Once the contest starts, after each minute:

- Maximum points of Problem A reduce by 2 points .
- Maximum points of Problem B reduce by 4 points.

It is known that Chef requires X minutes to solve Problem A correctly and Y minutes to solve Problem B correctly.

Find the **maximum** number of points Chef can score if he optimally decides the order of attempting both the problems.

?

X = 4   Y = 5

X = 20   Y = 1

	1 (A)	2 (B)
	500	1000
1m	498	996
2m	496	992
3m	494	988
4m	492	984
		980

Sample Input 1

```
4
10 20
8 40
15 15
20 10
```

Sample Output 1

```
1360
1292
1380
1400
```

Chef has a bucket having a capacity of K liters. It is already filled with X liters of water.

Find the **maximum** amount of extra water in liters that Chef can fill in the bucket without overflowing.