$8x:\ X=8\quad Y=40$

$800 - 16 = 484 \Rightarrow A$
$1000 - 192 = 808 \Rightarrow B$
$$1292$$

$800 - 96 \Rightarrow 404 \Rightarrow A$
$1000 - 160 \Rightarrow 840 \Rightarrow B$
$$1244$$

$8x:\ X=16\quad Y=4$

$800 - 10 = 490 \Rightarrow A$
$1000 - 36 = 964 \Rightarrow B$
$$1484$$

B	A
4	9
(16)	(18)

$800 - 18 = 482 \Rightarrow A$
$1000 - 16 = 989 \Rightarrow B$
$$1466$$

First solve B, then A.

$x = 15\quad Y = 18$

```
int x = sc.nx();
int y = sc.nx();

int ans = Y - X;
sout(ans);
```

```
if(x > Y){
    int ans = X - Y;
    Sout(ans);
}
else {
    ans = Y - X;
    sout(ans);
}
```

6 o/p

$N = 10$
$A = 8$
$A = 4$
$B = 6$

$R = 7$

$Y - 10$

$N = 2$
$A = 1\quad left = 0$
$A = 2\quad left = 0$
o/p: 2

Summary:

$N = 2\quad A = 2$
$N = 10\quad A = 6$
$N = 5\quad A = 3$
$N = 8\quad A = 5$

$N = 11$

A = 1	left = 0
A = 2	left = 1
A = 3	left = 2
A = 4	left = 3
A = 5	left = 2
A = 6	left = 0
A = 7	left = 4
A = 8	left = 3
A = 9	left = 2
A = 10	left = 1
A = 11	left = 0

ANS = N - left cupcake
as max. as possible

① Nested loops:
n = 5   m = 4

```
1 → 1   2   3   4
2 → 1   2   3   4
3 → 1   2   3   4
4 → 1   2   3   4
5 → 1   2   3   4
```

x-axis
y-axis

① System.out.print();