

Problem J. Snail

A snail crawls on a vertical pole **h** meters high, rising **a** meters in a day, and descending **b** meters during a night. On what day will the snail crawl to the top of the pole?

Input data  
The program receives natural numbers h, a, b as input.

Output  
The program should output one natural number. It is guaranteed that a> b.

Examples of  
input data

10

3

2

$$(20-5+(5-2) \text{ -1 } ) / (5-2) \quad + \quad 1 = 5 + 1 = 6$$

$$(21-5+(5-2) \text{ -1 } ) / (5-2) \quad + \quad 1 = 6 + 1 = 7$$

output  
8

Examples of  
input data

20

5

2

```
int a, b, h, c = 0; // h = height of pole, a = rising per day, b =  
descending at night, c what day on top of pole
```

output  
6

Examples of  
input data

21

5

2

```
c = ((h - a) + (a - b) -1 ) / (a - b) + 1;           // +1 acts as  
buffer for extra day
```

```
std::cout << c << std::endl;
```

output  
7

