# Drawing Book

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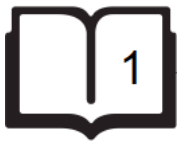
Problem Submissions Leaderboard Discussions Editorial

Brie's Drawing teacher asks her class to open their $n$-page book to page number $p$. Brie can either start turning pages from the front of the book (i.e., page number $1$) or from the back of the book (i.e., page number $n$), and she always turns pages one-by-one (as opposed to skipping through multiple pages at once). When she opens the book, page $1$ is always on the right side:




Each page in the book has two sides, front and back, except for the last page which may only have a front side depending on the total number of pages of the book (see the *Explanation* sections below for additional diagrams).

Given $n$ and $p$, find and print the minimum number of pages Brie must turn in order to arrive at page $p$.

**Input Format**

The first line contains an integer, $n$, denoting the number of pages in the book.
The second line contains an integer, $p$, denoting the page that Brie's teacher wants her to turn to.

**Constraints**

- $1 \leq n \leq 10^5$
- $1 \leq p \leq n$

**Output Format**

Print an integer denoting the minimum number of pages Brie must turn to get to page $p$.

**Sample Input 0**

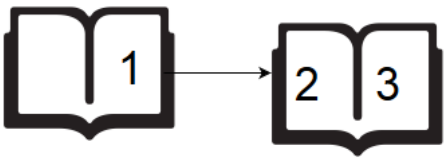
```
6
2
```

**Sample Output 0**

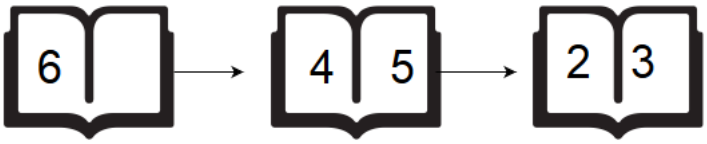
```
1
```

**Explanation 0**

If Brie starts turning from page $1$, she only needs to turn $1$ page:




If Brie starts turning from page **6**, she needs to turn **2** pages:




Because we want to print the minumum number of page turns, we print **1** as our answer.

**Sample Input 1**

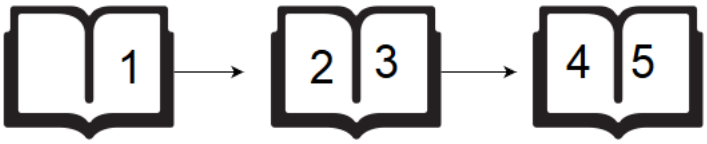
```
5
4
```

**Sample Output 1**

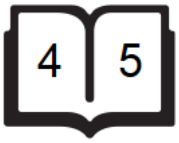
```
0
```

**Explanation 1**

If Brie starts turning from page **1**, she needs to turn **2** pages:




If Brie starts turning from page **5**, she doesn't need to turn any pages:




Because we want to print the minimum number of page turns, we print **0** as our answer.

Submissions: 5492
Max Score: 10
Difficulty: Easy

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Current Buffer (saved locally, editable) C#

```
1 using System;
2 using System.Collections.Generic;
3 using System.IO;
4 using System.Linq;
5 class Solution {
```

```
6
7       static int solve(int n, int p){
8           // Complete this function
9           return (Math.Min(p, n - p) / 2);
10      }
11
12      static void Main(String[] args) {
13          int n = Convert.ToInt32(Console.ReadLine());
14          int p = Convert.ToInt32(Console.ReadLine());
15          int result = solve(n, p);
16          Console.WriteLine(result);
17      }
18  }
19
```

Line: 10 Col: 6

Upload Code as File  Test against custom input  Run Code  Submit Code

## Congrats, you solved this challenge!

| | | |
|---|---|---|
| ✔ Test Case #0 | ✔ Test Case #1 | ✔ Test Case #2 |
| ✔ Test Case #3 | ✔ Test Case #4 | ✔ Test Case #5 |
| ✔ Test Case #6 | ✔ Test Case #7 | ✔ Test Case #8 |
| ✔ Test Case #9 | ✔ Test Case #10 | ✔ Test Case #11 |
| ✔ Test Case #12 | ✔ Test Case #13 | ✔ Test Case #14 |
| ✔ Test Case #15 | ✔ Test Case #16 | ✔ Test Case #17 |
| ✔ Test Case #18 | ✔ Test Case #19 | ✔ Test Case #20 |
| ✔ Test Case #21 | ✔ Test Case #22 | ✔ Test Case #23 |
| ✔ Test Case #24 | ✔ Test Case #25 | |

Next Challenge