

Bring Down The Class Average

Published by [Deep Xavier](#) in [JavaScript](#) ▼

arrays

math

numbers

What is the percentage you can score on a test, which **singlehandedly** brings down the class average by **5%**? Given an array of your classmates' scores, create a function that returns the answer. Round to the nearest percent.

Examples

```
takeDownAverage(["95%", "83%", "90%", "87%", "88%", "93%"]) → "54%"
```

```
takeDownAverage(["10%"]) → "0%"
```

```
takeDownAverage(["53%", "79%"]) → "51%"
```

Code

```
JS takeDownAverage.js > takeDownAverage
1  const takeDownAverage = (arr) => {
2    let sum1 = arr.reduce((acc, cv) => acc + parseInt(cv), 0);
3    let ct1 = arr.length;
4    let avg1 = sum1 / ct1;
5
6    let ct2 = ct1 + 1;
7    let avg2 = avg1 - 5;
8    let sum2 = avg2 * ct2;
9
10   return `${parseInt(Math.round(sum2 - sum1))}%`;
11 };
12 let [actualParam, expectedParam] = [
13   [
14     ['95%', '83%', '90%', '87%', '88%', '93%'],
15     ['10%'],
16     ['74%', '76%', '58%', '50%', '99%', '70%'],
17     ['64%', '95%', '89%', '69%', '96%', '59%', '84%', '93%'],
18     ['77%', '77%'],
19     ['73%', '98%'],
20     ['96%', '87%', '66%'],
21     ['94%', '79%', '54%', '62%'],
22     ['56%', '50%'],
23     ['100%', '51%', '98%'],
24     ['85%', '74%', '61%', '70%', '56%', '67%', '53%', '53%'],
25     ['67%', '91%', '93%', '87%', '81%', '79%', '88%', '69%', '92%', '69%'],
26     ['75%', '100%'],
27   ], [
28     '54%', '0%', '36%', '36%', '62%', '71%', '63%', '47%', '38%', '63%', '20%', '27%', '73%',
29   ],
30 ];
31 console.log(takeDownAverage(["95%", "83%", "90%", "87%", "88%", "93%"]));
32 console.log(takeDownAverage(["10%"]));
33 console.log(takeDownAverage(["53%", "79%"]));
```

Run

```
PS C:\js\edabit\e> node takeDownAverage.js  
54%  
0%  
51%  
PS C:\js\edabit\e> █
```