

[< average](#)[Main Page](#) → [Problems](#) → **Solve a Problem**[getGrade >](#)

○ BJP5 Exercise 4.14: pow2

[Show Header](#)

Language/Type: Java [if/else](#) [for loops](#) [method basics](#) [parameters](#) [return](#)

Author: Marty Stepp (on 2019/09/19)

Write a method named `pow2` (a variation of the previous `pow` exercise) that accepts a real number `base` and an integer `exponent` as parameters and returns the base raised to the given power. Your code should work for both positive and negative exponents. For example, the call `pow2(2.0, -2)` returns 0.25. Do not use `Math.pow` in your solution.

Type your solution here:

```
1
2
3
4
5
6
7 static double pow2(double base,int exponent){
8     double result=1;
9
10    if (exponent == 0)
11        return result;
12
13    //positive
14    while(exponent > 0){
15        result *= base;
16        exponent--;
17    }
18
19    //negative
20    while(exponent < 0 ){
21        result /= base;
22        exponent++;
23    }
24
25
26
27
28    return result;
29 }
```

This is a **method problem**. Write a Java method as described. Do not write a complete program or class; just the method(s) above.



4

Indent

**Submit**


- ☒ Sound F/X
- ☒ Highlighting

✔ You passed 11 of 11 tests.

[Go to the next problem: getGrade](#)

test #1: pow2(3.0, 4) return: 81.0 result: ✔ pass
test #2: pow2(2.0, 9) return: 512.0 result: ✔ pass
test #3: pow2(5.0, 7) return: 78125.0 result: ✔ pass
test #4: pow2(3.0, 14) return: 4782969.0 result: ✔ pass
test #5: pow2(1.0, 10) return: 1.0 result: ✔ pass
test #6: pow2(10.0, 1) return: 10.0 result: ✔ pass
test #7: pow2(0.0, 8) return: 0.0 result: ✔ pass
test #8: pow2(8.0, 0) return: 1.0 result: ✔ pass
test #9: pow2(3.5, 3) return: 42.875 result: ✔ pass
test #10: pow2(2, -2)

return: 0.25
result:  pass

test #11: pow2(8.0, -1)
return: 0.125
result:  pass

If you do not understand how to solve a problem or why your solution doesn't work, please contact your TA or instructor.
If something seems wrong with the site (errors, slow performance, incorrect problems/tests, etc.), please [contact us](#).

Is there a problem? [Contact a site administrator](#).