PROBLEM 6-1 (2/2 points)

Suppose you have a six sided die, with sides number 1 through 6, and you roll it several times.

As in the problems from Lecture 3, answer each question in reduced fraction form - eg 1/5 instead of 2/10.

What is the probability that the first time you observe a 1 is on the second roll?

5/36

You have used 2 of 2 submissions

Help

PROBLEM 6-2 (2/2 points)

What is the probability that the first time you observe a 1 is on the third roll?

25/216

Final Check | Save | *You have used 1 of 2 submissions*

PROBLEM 6-3 (10/10 points)

You observe that the probability of first seeing a 1 on the n-th roll decreases as n increases. You would like to know the smallest number of rolls such that this probability is less than some limit. Complete the Python procedure, `probTest(limit)`, to compute this.

```
def probTest(limit):
    n = 1
    while ((5 ** (n - 1)) / float(6 ** n)) > limit:
        n += 1
    return n
```

Correct

Test results

See full output

CORRECT

See full output

Check Save *You have used 1 of 10 submissions*