

## 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?

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?

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.

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

Correct

## Test results

CORRECT

[See full output](#)[See full output](#)

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You have used 1 of 10 submissions



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