P(rolling higher than a 7
on the sum of 2 dice)

Method 1   Counting outcomes

DIE 2

	1	2	3	4	5	6
1	2	3	4	5	6	7
2	3	4	5	6	7	8
3	4	5	6	7	8	9
4	5	6	7	8	9	10
5	6	7	8	9	10	11
6	7	8	9	10	11	12

DIE 1

There are 36 possible outcomes
There are 15 successful outcomes
$\therefore P = \dfrac{15}{36}$

Method 2   Symmetry

$P(\text{rolling } 7) = \dfrac{6}{36}$

$P(\text{rolling} < 7) = P(\text{rolling} > 7) = p$

We have $2p + \dfrac{6}{36} = 1$

$\Rightarrow 2p = \dfrac{30}{36}$

$\Rightarrow p = \dfrac{15}{36}$