
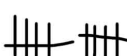

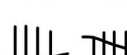


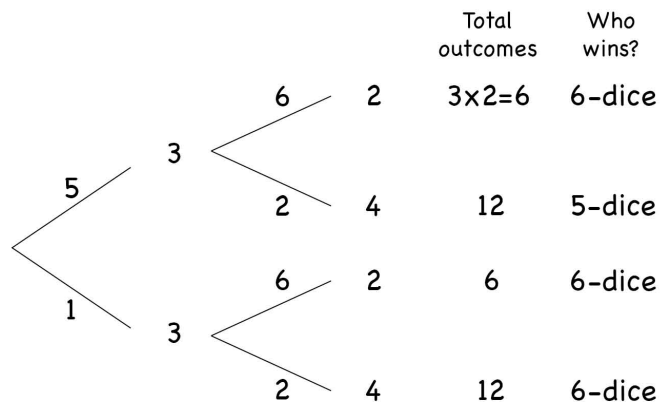


## Handout 3: Analysis – Counting Outcomes

1. Pick two dice. Roll both dice and see who wins.
2. Repeat (1) a bunch of times with the same dice. Tally the results. For instance, if we started with the 5's dice and the 6's dice, we might get:

5's Dice	6's Dice
	
	
	

3. Compare what you got with the possible outcomes from 36 distinct combinations.



For instance, the 5's dice has three 5's and three 1's, and the 6's dice has two 6's and four 2's. So for the 5's dice to win requires it to land on one of the three possible 5's, and in each case the 6's dice must land on one of the four possible 2's. Thus, there are  $3 \times 4 = 12$  possible ways for the 5's dice to win.