**AFTER THE RACE --**

1. **List the all possible combinations for each sum**
* Hint: 3+5 is NOT the same as 5+3!
* Suggestion: Be orderly in writing your combinations…it will go faster and lessen the chance of accidently skipping over a combination.
* Disclosure: All the boxes below do not need to be filled in.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| SUM | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| COMBINATIONS |  |  |  |  |  |  |  |  |  |  |  |
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1. When rolling two dice, what is the probability of getting two 1s? \_\_\_\_\_\_\_\_\_\_

**(Write your answer as a fraction for example, instead of writing 7 out of 11, write** $\frac{7}{11}$**.)**

1. What is the probability of getting two 4s? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. What is the probability of rolling a sum of 5? \_\_\_\_\_\_\_\_\_\_\_\_
3. a. List all the combinations that equal 4 and that equal 6.

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b. Are the chances greater for rolling a sum of 4 or 6? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Express as a fraction, how many combinations equal a sum of 8. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. What is the probability of getting a sum that is an even number that is greater than 2? \_\_\_\_\_\_
3. What is the probability of getting an odd number that is greater than 3? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. What is the probability of rolling a sum of 9 or higher \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Required:** Starred questions

**Your Choice:** Pick two of the four questions to answer

* Does the outcome vary very much from race to race?
* Which horses are most likely to win? Why?
* Which horses are least likely to win? Why?
* Could the winning distance have been predicted?

 Could the finishing order have been predicted?

 Do you think the other groups will have the same results? Justify. 😊

