Homework Assignment 3
Due by 5pm via Canvas, Feb 9

SDS 321 Intro to Probability and Statistics

1. (1+1 pts) How many different letter arrangements can be made from the letters?

   (a) alohomora
   (b) dumbledore

2. (1+3) I am making a quiz team of one boy and one girl from my class which has 10 girls and 15 boys. How many possible results are there if

   (a) If I pick 1 boy and 1 girl and pair them up?
   (b) If I pick 6 boys and 6 girls and pair them up?

3. (1+3+3+3) Dr. Loh is making a Math Olympiad team of 3 boys and 3 girls from a group of students which has 6 girls and 8 boys. How many ways can he make a team this way

   (a) Without any restrictions?
   (b) If two of the girls refuse to be on the same team?
   (c) If two of the boys refuse to be on the same team?
   (d) If one girl and one boy refuse to be on the same team?

4. (1+3) Harry is dividing ten pieces of fizzing whizzbees[1] among his three kids. How many divisions are possible,

   (a) Without restrictions?
   (b) If each child demands at least two?

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[1]Magical sweets from the wizarding world. Check pottermore.com for more details.