# Probability Rules

Remember:

* and – multiply (with or without replacement?)
* or – add (subtract overlap – both)
* tell the story! use the words and/or

1. 63% of people read Yated, 51% read HaModia, and 24% read both. What is the probability that a randomly selected person reads Yated or HaModia? *0.9*
2. Out of 5 batteries, 2 are defective. What is the probability of choosing 2 good ones? *0.3*
3. Out of 6 chargers, 2 are defective. What is the probability of choosing both defective, if the first one is replaced before choosing the second? *0.11*
4. Out of a bag of marbles, there are 3 red, 5 purple, and 6 black. What is the probability of choosing red or black? *0.64*
5. If one card is selected from 52, the probability of selecting an ace or a black is: *28/52 = 0.538*
6. If you roll two fair dice, what is the probability the top faces will add up to 9? *0.11*
7. 20 % of the students aced pandas, 25% aced sequel, and 10% aced both. The probability that a student selected at random aced pandas or sequel is: *35%*
8. Challenge!

The probability of Jane winning a game of darts is . If she plays three games, what is the probability of winning at least one game? (Hint: tell the story and use the complement) *0.578*