

Calculate the total number of possible outcomes.

a) On the small island of Jenga, the license plates have two alpha (A to Z) values and then two numerical values. How many different license plates are there?

b) You want to arrange 10 of your favorite CD's along a shelf. How many different ways can you arrange the CD's assuming that the order of the CD's makes a difference to you?

c) You find out that a lock has the values of 5, 33, 2, 71, and 15. How many different ways could these numbers be arranged?

d) How many ways can 10 volleyball team members line up if the captain must be 1<sup>st</sup> in the lineup?

e) In how many different ways can five students be seated in a row of five desks?

f) A student, taking a true-false test, randomly guesses at every one of the 10 answers. How many different sets of answers could be produced?

g) How many ways can you choose two jellybeans from a bag of 15 (order matters & no-replacement)?

h) There are 24 students in the class and 5 desks in the front row. How many different ways could the front row be filled out?

i) In how many different ways can the letters in the word PRIZE be scrambled?

j) Each morning a boy chooses his own type of cereal and eggs for breakfast. If he has three types of cereal and four types of eggs from which to choose, how many different breakfasts can he choose?

k) At a restaurant there are four types of beverages and six types of sandwiches. How many different orders consisting of one beverage and one sandwich are there?

l) There are 20 people in a raffle. First pick gets \$50, second gets \$25 and third gets \$10. How many different arrangements of winners could there be?

m) A police lineup of 5 suspects is being created. How many different ways can you arrange these 5 people?