Ex1, There are 3 kinds of pies and 4 kinds of ice cream.
(a) How many ways to select 1 pie and 1 ice cream?

(b) How many ways to select 1 item?

Ex2, There are 3 different hats, 2 different ties, and 4 different shirts on sale.
(a) How many ways to select 1 hat and 1 tie and 1 shirt?

(b) How many ways to select any 1 item.

(c) How many ways to select 2 items, 1 shirt and either a hat or a tie?

(d) How many ways to select 2 items, either 2 shirts or 2 hats?

Ex3, A pin code consists of 2 digits of numbers or letters.
How many ways to choose a pin code of
(a) numbers only?

(b) letters only?

(c) 1 letter and 1 number in any order.

(d) 1 letter first, then 1 number

(e) at least 1 letter
Ex4, Math course is given at 8 o'clock and 10 o'clock. English is given at 9, 10, or 11 o'clock. Art is given at 9 or 10 o'clock. How many ways are there to take all 3 courses?

Ex5, Course RE1, RE2, RE3 must be taken within a week, Monday through Friday. Every course is given every day. Only one course can be taken each day. Those 3 courses must be taken in order. How many ways to take these courses?

Ex6, Lee family of 3 members and Garcia family of 2 members will sit on a row of 5 seats.
(a) How many ways to seat the 5 people?

(b) How many ways to seat if each family must sit together?

(c) How many ways to sit if Lee family members must sit together? 
   (Garcia family members may sit together or be separated.)