

# 7.3

# Quick Notes

## Probability and counting (combining the skills)

Ex) If we toss a coin five times, find the probability that we see at least two tails.

Ex) A company has 11 female and 15 male employees. If we randomly select a committee of four people, find the probability that;

- a) there are 2 males and 2 females.
- b) there is a majority of males
- c) there is a majority of females

Ex) If we roll a die 5 times, find the probability that the sum is at least 7.

Ex) If there are 25 people in a room, find the probability that at least two people share a birthday.

Ex) If you create a 4 letter code from an English alphabet, what is the probability that no letters are repeated?

Ex. In all arrangements of first seven letters of an English alphabet (with no repetitions), what is the probability that A will be the first letter?

Ex) If we are randomly dealt 5 cards from a standard 52 card deck, find the probability that we get;

- a) all cards are the same suit
- b) at least one is a King