Chapter 4:
Mid-chapter Review

- Make sure you have completed all of the previous homework assignments from sections 4.1 to 4.3.

- Read *FREQUENTLY ASKED Questions* on page 258.

- Complete the following from *PRACTISING* on page 259:
    #1 – 7, 9, 11, 12, 13

WYNTKABATD

Section 4.1

- How to use the Fundamental Counting Principle to solve "AND" counting problems (multiple decisions with options to choose from).
- How to create an outcome table for situations involving a limited number of outcomes.
- How to create a tree diagram for situations involving a limited number of outcomes.
- How to create an ordered list for situations involving a limited number of outcomes.
- Recognize when the fundamental counting principle can be used and when it can't.
- Recognize when "cases" are involved.
- Using a Venn diagram or Principle of Inclusion and Exclusion to solve an "OR" counting problem.

Section 4.2

- How to evaluate a factorial or expressions involving multiple factorials.
- How to manipulate factorial expressions involving numbers and variables.(expand or collapse)
- How to simplify a factorial expression involving a variable.
- Solving a counting problem using a factorial.

Section 4.3

- Understand and evaluate nPr notation.
- Solving counting problems using the permutation formula.