# Chapter 2: Combining Sum and Difference

Studying Tips: sum and difference of functions focus on the domain of the functions. Adding and subtracting functions is simple; identifying the domain of the final result is the challenging part. When in doubt, the domain of the combined function is usually the domain of the child function that has the smallest domain. Since this concept is relatively simple, we recommend you focus on doing the challenging questions from the homework, in case that your teacher puts tricky questions on tests. These questions are usually worth 1-3 marks.

# Chapter 3: Combining Product

Studying Tips: when you multiply two functions together, you will always get a single function. We recommend you to identify the type of that function, and then describe its corresponding characteristics. These questions are usually worth 2-3 marks.

# Chapter 4: Quotients of Functions

Studying Tips: when you divide a function by another, you will usually get a rational function. In this case, identify the asymptotes and holes before you state the domain. Many students lose marks as they forget to check if there is an oblique asymptote and a hole. Questions from this chapter are usually worth 2-3 marks.

# Chapter 5: Composition of Functions

Studying Tips: picture the composition of functions as the process of making a burger; you are stucking one function into the variables of another function. On tests, teachers can give you the graph of two functions and ask questions based on the graphs. These questions are usually worth 3 marks.