### Chapter 1

* cofunction identities
* sine is an odd function, therefore
* cos is an even function, therefore
* tan is an odd function, therefore

### Chapter 2

* Compound Angle Formulas

### Chapter 3

* Double Angle Formulas

### Chapter 4

* proving trigonometric identities
  + simplify expressions when you can by rewriting the expressions using any of the identities.
  + use and where possible
  + add, subtract, multiply and divide functions
  + don’t forget to factor, expand, or use a common denominator where possible

### Chapter 5 & 6

* because of the periodic nature, trigonometric equations have an infinite number of solutions. Therefore, it is important to pay attention to the specific interval required by the question.
* a quadratic trigonometric equation may have multiple solutions in the interval
* remember to use any kind of formulas (Pythagorean, compound angle, double angle
* in some applications, after changing part of the expression to an identity equation, expanding, factoring, simplifying, and moving the right side to the left side, etc, the expression may result in a quadratic trigonometric equation. In this case, you can solve it algebraically.
* these two chapters require the students to more practice/textbook questions so that they are confident when solving for trigonometric equations.