

MATH 135 STUDY GUIDE CBE OUTLINE

Great online resource for a refresher:

www.khanacademy.org

- **Chapter 6 Key Concepts**
 - Converting between decimal notation and scientific notation
 - Application of scientific notation
- **Chapter 7 Key Concepts**
 - Solving linear equations
 - Using intercepts to graph linear equations
 - Applying the slope-intercept form in solving problems
 - Building a linear model using point and slope
 - Using two points to build a linear model
- **Chapter 8 Key Concepts**
 - Finding percent of a number
 - Percent of change
 - Percent of increase/decrease using formula
 - Finding the price of an item by calculating sales tax
 - Calculating simple interest
 - Calculating Future Value
 - Calculating Add-On interest
 - Calculating future value with compounding interest
 - Calculating Average daily balance
 - Calculating Income Tax
- **Chapter 9 Key Concepts**
 - Find measure of a complementary angle
 - **Remember Complementary adds up to 90 degrees**
 - **Remember Supplementary adds up to 180 degrees**
 - Find measure of missing of an angle
 - Find measure of angles created by parallel lines intersected with a transversal, given the measure of an angle
 - Calculate area of a shape
 - Remember **area** is a **squared measurement**
 - Calculate Area and Circumference of a Circle
 - Remember Circumference of a circle is its perimeter
 - **Perimeter** is a **linear measurement**
 - Calculate Volume of a solid
 - **Volume** is a **cubic measurement**
 - Metric Conversions

- **Chapter 12 Key Concepts**
 - Counting Methods
 - Tree diagrams and slots method
 - Know how to read outcomes from tree diagram
 - Know how to read Permutations and Combinations
 - Combinations & Permutations
 - Simplifying Expressions with Factorials
 - Knowing the Difference between when to use a Combination vs. a Permutation
 - Permutation – when order matters
 - Combination – when order doesn't matter
- **Chapter 13. 1 Key Concepts**
 - Calculating probability by counting outcomes in a sample space
 - Relationship between Probability and Odds
- **Chapter 14.2 Key Concepts**
 - Calculating Mean, median, and mode
 - Finding the 5 Number Summary and using it to construct a Box & Whisker Plot

Remember you may use a calculator on the exam. You will be given a formula-sheet, but you will need to know how to use the formulas. Practice rounding to the nearest tenth and hundredths. In math always put the appropriate unit or symbol with your answer.