

## TEST 2 MATERIAL

## MATH 171

CHAPTER 6

## FACTORING

- COMMON FACTOR
- difference of squares
- quadratics
  - Type 1  $x^2 + ax + b$
  - Type 2  $ax^2 + bx + c$
- sum & difference of cubes

## SIMPLIFYING

- Expressing polynomial fractions in lowest terms
- Adding / subtracting / multiplying / dividing polynomial fractions

## SOLVING

- SOLVING EQUATIONS containing fractions
- SOLVING QUADRATICS using
  - (a) FACTORING
  - (b) quadratic equation

## CHAPTER 7

### Graphing A quadratic

- Identify vertex
- Find x, y intercepts
- Determine if graph is facing upwards / downward

## CHAPTER 13

- Graph exponential functions
- Solve exponential word problems
  - doubling time
  - half life
  - interest
  - Newton's Law of heating/cooling

### LOGARITHMS

- Evaluate log of any base on your calculator
- Simplify logarithmic equations
- Express a number in scientific notation using log
- Solve exponential & logarithmic equations.