

## Math Mid-Term Exam Outline - 68 Questions Total

- No Calculator Section - **11 questions** - Will involve basic arithmetic (Add, Subtract, Multiply, and Divide).
- Multiple Choice - **50 questions** - Scantron
  - **Chapter 2:** An example Multiple Choice is different real numbers (**Properties**).
- Open-ended - **7 Problems** - This section is like short answers. There may be questions with more than one part.
  - **Chapter 2:** An example open-ended question is  $-n$ ; evaluate when  $n = -2$ . The answer is: **2**
- **Notes**
  - Domain - x values
  - Range - y values
  - A **function** is for each input there is one output. In a table with x and y values, if there is the same number under x twice, it is not a function. You can't have two outputs for one number (x).
  - **Square Roots** - The answer is irrational if it is not a perfect square.
  - **Parallel Lines**- They have the same slope.
  - If something is x equals ( $x=$ ), it is always a vertical line.
  - If something is y equals ( $y=$ ), it is always a horizontal line
  - 3 Ways to graph equations
    - **Slope intercept form** -  $y=mx + b$
    - **A Table** - x in column and y in the other.
    - **Find the x and y intercepts** - For x intercepts, y is zero and for y intercepts x is zero.