

Exam 1 Topics

Math 1060Q – Summer 2014
Professor Hohn

1 Algebra skills

- Solving different types of equations
- Inequalities
- Intervals (writing answers in interval notation)
- Definition of absolute value
- Solving equations with absolute value

2 Functions

- Identifying a function (algebraically and graphically)
- Vertical Line Test
- Domain and range of a function
- Graphing functions (various types: lines, quadratics, cubics, absolute value, piecewise functions, etc)

3 Composition of functions

- Composition of functions
- Decomposition of functions
- Domain and range of resulting functions
- Combine or compose functions using tables or graphs

4 Graph transformations

- Graph transformations (up, down, left, right, stretch, shrink, reflections, etc)
- Using graph transformations to graph different types of functions

5 Inverse functions

- Determine if a function is 1-1
- Horizontal Line Test
- Finding the inverse of a function
- Domain and range of the inverse function

6 Linear and quadratic functions

- Equation of a line (slope, x-intercept, y-intercept, point-slope form, slope-intercept form, etc)
- Finding the equation of a line from information given
- Parallel and perpendicular lines
- Graphing lines
- Quadratic equations (vertex, minimum/maximum, zeros)
- Solving quadratic functions (factoring, using the Quadratic Formula)
- Completing the square
- Graphing quadratic functions

7 Exponents

- Rules of exponents