|  | TRACK #1 (logs,exps) | TRACK #2 (algebra) | TRACK #3 (Functions) | TRACK #4 (Matrices,LP,Business) |
| --- | --- | --- | --- | --- |
| 6/1 | Preliminaries* HW notebook
* Notebook format
* Pen
* How to study
* Grading policy
* Cheating, etc

**X quiz** | Algebra# systems **N,W,Z,Q,R,C**set symbols* “element-of”
* “subset-of”

Field properties | Functions* What is a relation
* What is a function

Linear functionsLine:* polynomial form
* slope-intercept form
* point-slope form
 | * What is a matrix
* Rank of a matrix
* + -
* x
 |
| 6/6 | **Inventory test assigned** | **Quiz: 302 # sys*** Order properties
* Solve inequalities
* Solve absolute value inequalities

Order of operations (?) | **Quiz 79:Graph Line*** convert pointSlope🡪 SlopeIntercept
 | **Quiz: matrix x**Matrix equation of a 2x2 systemDeterminant (2x2),(3x3)Matrix inverse (2x2): inv(2,3/4,5)?Solving a 2x2 system by Cramer’s Rule |
| 6/8 | laws of exponentsxmxn=xm+n(xm) n = xmn(xy) n = xn ynx1 = xx0 = 1 (UNLESS x=0) | **Q19.1:Simple inequalities**PolynomialsFactoringFactoringAnything.pdf | * graph from PS
* graph from poly form

Circle* Distance formula
* Definition of circle
* Circle equation
* Shifted equation of a circle
* Convert to vertex form
 | Matrix inverse (2x2)Solving a 2x2 system by matrix inverseMatrix inverse (3x3)Lin Sys 2x2:* Substitution
* Gaussian Elimination
* Graphing
* Cramer’s Rule
* Matrix inverse
 |
| 6/13 | Simplify radical expressionsExponential functionGraphing exponential fn.Definition of logarithmlog 🡨🡪exponential. |  |  | **Q8F:Linear Systems (2x2)**[Announce: quiz on 6/15 on matrix inverse of 3x3 system.] |
| 6/15 | **Q30.1:Simplify √ exprs.**Exponential properties | **Q302A:Factor Natural #s** Factoring by groupingFactor theoremSpecial methods of factoring | * Methods of defining a function
* Domain and range
* Domain specified/unspecified
 | Graphing systems of linear inequalities |
| 6/20 | Review “Simplify √ expr” Logarithm propertieslog(xy) = log(x) + log(y)log(xp) = p log(x)log(x/y) = log(x) – log(y)logb( ) is inverse of b( ) | **Q1.7:Factoring Polynomials**The quadratic equationQuadratic Equation skillsGraphing a quadratic | Algebra of functions (+,-,x,/)Function compositionFunction inverses* Verbal string method
* Algebraic method

Graph of a function & its inverse |  |
| 6/22 | graphing log(x)**Quiz: graph exponentials** Change of base for logsCompound interest | Convert quadratic to vertex formSolving radical equationsSolving rational equations | Review function compositionDifference Quotient | **Q3x3:Linear Systems** Linear programming* Feasible region
* Finding corners
* The corner method
* Level line

Level line method |
| 6/27 | Exponentials as mathematical models | Quadratic as mathematical model | **Quiz: functions, function inverses, function composition** | **Q: Linear Programming (easy)**Amortization and Sinking Functions |
| 6/29 | **Q4.7:functions,logs,exp** | **Q: Graphing Quadratics** | Difference quotient again | **Q: Linear Programming** |
| 7/6 |  |  | **Q: Difference quotient** |  |
| 7/11 |  |  |  |  |
| 7/13 | **FINAL EXAM** | **FINAL EXAM** | **FINAL EXAM** | **FINAL EXAM** |