|  | TRACK #1 (logs,exps) | TRACK #2 (algebra) | TRACK #3 (Functions) | TRACK #4 (Matrices,LP,Business) |
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| 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 functions  Line:   * 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 system  Determinant (2x2),(3x3)  Matrix inverse (2x2): inv(2,3/4,5)?  Solving a 2x2 system by Cramer’s Rule |
| 6/8 | laws of exponents  xmxn=xm+n  (xm) n = xmn  (xy) n = xn yn  x1 = x  x0 = 1 (UNLESS x=0) | **Q19.1:Simple inequalities**  Polynomials  Factoring  FactoringAnything.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 inverse  Matrix inverse (3x3)  Lin Sys 2x2:   * Substitution * Gaussian Elimination * Graphing * Cramer’s Rule * Matrix inverse |
| 6/13 | Simplify radical expressions  Exponential function  Graphing exponential fn.  Definition of logarithm  log 🡨🡪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 grouping  Factor theorem  Special 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 properties  log(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 equation  Quadratic Equation skills  Graphing a quadratic | Algebra of functions (+,-,x,/)  Function composition  Function inverses   * Verbal string method * Algebraic method   Graph of a function & its inverse |  |
| 6/22 | graphing log(x)  **Quiz: graph exponentials**  Change of base for logs  Compound interest | Convert quadratic to vertex form  Solving radical equations  Solving rational equations | Review function composition  Difference 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** |