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|  | Regular Algebra 2 Pacing Guide 2020 -2021 |
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| Semester 1 | 1. Solving Equations & Inequalities |
|  | a. solve linear equations |
|  | b. Literal equations |
|  | e. solve linear inequalities |
|  | d. solve absolute value equations & inequalities |
|  | 2. Linear Equations & Functions |
|  | a. functions & graphs |
|  | b. slope & rate of change (delta) |
|  | c. graph linear equations |
|  | d. write equation of line  Slope-Intercept & Point-Slope  Use Standard Form to find interceps |
|  | e. Best-fit lines & correlation (scatter) |
|  | f. graph inequalities in two variables |
|  | g. absolute value equations & transformations |
|  | 3. Matrices & Determinants |
|  | a. matrix operations |
|  | b. multiplying matrices |
|  | c. determinants |
|  | d. solve inverse & augmented |
|  | 4. System of Equations & Inequalities |
|  | a. graph |
|  | b. algebraically – substitution & elimination |
|  | c. graph linear inequalities |
|  | 5. Quadratic Functions |
|  | a. solve by graphing (parabola) |
|  | b. solve by factoring |
|  | c. solve by square root |
|  | d. complex numbers |
|  | e. solve with quadratic formula & discriminant |
|  | f. graph & solve quadratice inequalities |
|  | 6. Polynomials |
|  | a. properties of exponents |
|  | b. evaluate & graph polynomial equations |
|  | c. add, subtract, & multiply polynomials |
|  | d. factor polynomials |
|  | e. factor & remainder theorem |
|  | f. rational zeros |
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| Semester 2 | 7. Powers, Roots, & Radicals |
|  | a. nth roots & rational exponents |
|  | b. properties with rational exponents |
|  | c. composite functions |
|  | d. inverse functions |
|  | e. graph square root & cube root |
|  | f. solve radical equations |
|  | 8. Rational Equations & Functions |
|  | a. multiply & divide rational expressions |
|  | b. add & subtract complex fractions |
|  | c. solve rational equations |
|  | 9. Exponents & Logarithms |
|  | a. graph exponential growth |
|  | b. graph exponential decay |
|  | c. common log |
|  | d. natural log |
|  | e. properties of logarithms |
|  | f. solve exponential & logarithmic equations |
|  | 11. Sequence & Series |
|  | a. writing sequences (patterns) |
|  | b. arithmetic sequence & series |
|  | c. geometric sequence & series |
|  | d. infinite geometric series |
|  | 12. Probability & Statistics |
|  | a. permutations |
|  | b. combinations |
|  | c. Binomial Theorem |
|  | d. Theoretical probability |
|  | e. independent & dependent events |
|  | f. normal distribution |