Algebra II TEKS Tree – Readiness Standards

- **2A.2(A)**
  - Graph
    - $f(x) = \sqrt{x}$
    - $f(x) = 1/x$
    - $f(x) = x^3$
    - $f(x) = \sqrt[3]{x}$
    - $f(x) = b^x$ — b is 2, 10, or e
    - $f(x) = |x|$
    - $f(x) = \log_b x$ — b is 2, 10, or e
  - Analyze — Key features
    - Domain
    - Range
    - Intercepts
    - Symmetries
    - Asymptotic behavior
    - Maximum
    - Minimum
- **2A.2(C)**
  - Describe / Analyze — Relationship
    - Function
    - Inverse
  - Include
    - Quadratic/Square root
    - Logarithmic/Exponential
    - Domain and range restrictions
- **2A.3(A)**
  - Formulate — Systems of equations
  - Include
    - 3-variables — 3 linear equations
    - 2-variables
      - 1 linear equation
      - 1 quadratic equation
- **2A.3(B)** — Solve — 3-variable systems
  - Gaussian elimination
  - Technology (matrices)
  - Substitution
- **2A.4(B)**
  - Write — Equation — Parabola
  - Use — Attributes
    - Vertex
    - Focus
    - Directrix
    - Axis of symmetry
    - Direction (opening)
- **2A.4(C)** — Determine — Effects on $f(x) = \sqrt{x}$
  - $af(x)$
  - $f(x) + d$
  - $f(bx)$
  - $f(x - c)$
- **2A.4(F)** — Solve — Equations
  - Quadratic
  - Square root
- **2A.5(A)** — Determine — Effects on $f(x) = b^x$ and $f(x) = \log_b x$
  - $af(x)$
  - $f(x) + d$
  - $f(bx)$
  - $f(x - c)$
- **2A.5(D)** — Solve — Equations
  - Exponential ($y = ab^x$) • $a \neq 0$, $b > 1$
  - Logarithmic • real solutions
- **2A.6(E)** — Solve — Equations — Absolute value • linear
- **2A.6(I)** — Solve — Equations — Rational • real solutions
- **2A.6(L)** — Formulate / Solve — Equations — Inverse variation
- **2A.7(E)**
  - Determine
    - Linear factors
      - Polynomials (degree 3)
      - Polynomials (degree 4)
    - Quadratic factors
      - Polynomials (degree 3)
      - Polynomials (degree 4)
  - Include — Factoring
    - Sum of cubes
    - Difference of cubes
    - Grouping
- **2A.7(F)** — Determine
  - Sum — Rational expressions
  - Difference — Rational expressions
  - Product — Rational expressions
  - Quotient — Rational expressions
  - (degree one and degree two)
- **2A.7(H)** — Solve — Equations — Rational exponents
- **2A.8(C)**
  - Predict / Make
    - Decisions
    - Critical judgments
  - Use — Data
    - Linear
    - Quadratic
    - Exponential

© 2024 lead4ward.com v. 5.30.24