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YouTubeVideos

Intermediate Algebra

MAT 1033

Chapter 2 – Equations and Inequalities

Algebra – linear equations – general – concept – types of solutions
Algebra – linear equations – general – concept – steps of solving
Algebra – linear equations – two steps - example 1
Algebra – linear equations – two steps – example 2

Algebra – formula –example 1

Algebra – inequalities – example
Algebra – solving a linear inequality –example 1
Algebra – solving a linear inequality – example 2

Algebra – inequalities – set-builder notation, graphs, interval notation - concept
Algebra – inequalities – compound inequalities – two examples – 1
Algebra – inequalities – compound inequalities – two examples – 2

Chapter 3 – Introduction to Graphing and Lines

Algebra – graphs and functions – plotting points - examples
Algebra – graphs and functions – relations – example 1 – function? y/n; domain/range
Algebra – graphs and functions – general – examples – determining function using vertical line test
Algebra – graphs and functions – domain and range -examples

Algebra – lines – graphing – example 1 – using table method
Algebra –lines – graphing –example 2 - using intercepts
Algebra – lines – graphing – example 3 – using slope-intercept form

Algebra – lines – slope –example 1
Algebra – lines – special cases – examples – vertical/horizontal lines

Algebra – lines – parallel and perpendicular – concept 1
Algebra – lines – parallel and perpendicular – example 1
Algebra – lines – parallel and perpendicular – example 2
Algebra – lines – parallel and perpendicular – example 3

Algebra – linear inequalities – graphs – example 1
Algebra – linear inequalities – graphs – example 2

Chapter 5 – Polynomials

Exponents

Algebra – exponential expressions – concept 1 – exponent rules

Operations

Algebra – polynomials – addition – example 1

Algebra – polynomials – subtraction –example 1
Algebra – polynomials – subtraction – example 2
Algebra – polynomials – subtraction – example 3

Algebra – polynomials - multiplication – example 1
Algebra – polynomials – multiplication – example 2
Algebra –polynomials – multiplication – example 3
Algebra – polynomials – multiplication – example 4
Algebra – polynomials – multiplication – example 5

Factoring
"The Art of Factoring" Presentation - on PREZI
Algebra – polynomials – factoring – concept – overview
Algebra – polynomials – factoring – concept 2 – prime or not
Algebra – polynomials – factoring – example 1 – factoring by grouping
Algebra – polynomials – factoring – example 2 – grid method
Algebra – polynomials – factoring – example 3 – grid method
Algebra – polynomials – factoring – example 4 – factoring by grouping
Algebra – polynomials – factoring – example 5 – GCF and difference of squares
Algebra – polynomials – factoring – example 6 – difference of squares
Algebra – polynomials – factoring – example 7 - GCF
Algebra – polynomials – factoring – example 8 – difference of cubes
Algebra – polynomials – factoring – example 9 – quadratic method
Algebra – polynomials – factoring – example 10 – quadratic method
Algebra – polynomials – factoring – example 11 – AC method or splitting the middle term
Algebra – polynomials – factoring – example 12 – box method
Algebra – polynomials – factoring – example 13 – trial and error method
Algebra – polynomials – factoring – example 14 – product/sum method
Algebra – polynomials – factoring – example 15 – fake factoring
Algebra – polynomials – factoring – example 16 – sum of cubes
Algebra – polynomials – factoring – example 18 – difference of squares, difference of cubes, and sum of cubes in one polynomial

To check your factoring…
Algebra – polynomials – factoring and multiplying – concept 1
Algebra – polynomials – factoring and multiplying – concept 2

Chapter 6 – Rational Expressions and Equations

Algebra – rational expression – simplifying – two examples

Algebra – rational expression – multiplication – example 1
Algebra – rational expression – division – example 1
Algebra – rational expression – subtraction – example 1

Algebra – rational expressions – complex fractions –example 1
Algebra – rational expressions – complex fractions –example 2

Algebra – polynomials – division –example 1 – long division
Algebra – polynomials – division – example 2 – synthetic division
Algebra – polynomials – division – example 3 – polynomial by monomial

Algebra – polynomials – using remainder theorem –example 1

Algebra – rational equation –example 1
Algebra – rational equation – example 2
Algebra –rational equation – verifying a solution – using TI-30
Algebra – rational equation – word problem – example 1 – work problem

Chapter 7 – Radical Expressions and Equations

Algebra – radical expressions – concepts – explain the concept using socks

Algebra – radical equations – example 1
Algebra – radical equations – example 2
Algebra – radical equations – example 3 – different root
Algebra – radical equations – example 4 – with two square roots

Algebra –rationalizing the denominator- two examples

Algebra – distance between two points – example 1

Algebra – complex numbers – radicals – example 1
Algebra – complex numbers – radicals – example 2
Algebra – complex numbers – radicals – example 3
Algebra – complex numbers – radicals – example 4

Algebra – complex numbers – addition – example 1

Algebra – complex numbers – subtraction – example 1
Algebra – complex numbers – subtraction – example 2
Algebra – complex numbers – multiplication – example 1
Algebra – complex numbers – multiplication – example 2
Algebra – complex numbers – division – example 1

Chapter 8 – Quadratic Equations

Solve by completing the square
Algebra – quadratic equations – solving – example 5
Algebra – quadratic equations – solving – example 6

Solve by quadratic formula
Algebra – quadratic equations – solving – example 5 - alternative

Algebra – quadratic equations – formula song – I sing as Batman

Algebra – quadratic equations – using discriminant - concept

Algebra – quadratic function – graph – example 1
Algebra – quadratic function – graph – example 2

Chapter 4 – System of Equations

Algebra – system of equations – types of solutions – concept 1

Algebra – system of equations – elimination method – example 1
Algebra – system of equations – substitution method – example 1