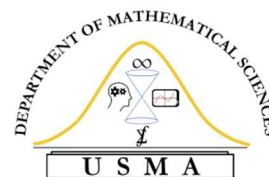


MA100 - Critical Skills video links



(Press Ctrl + click to activate the video)

* All videos listed below are advertisement supported, the Mathematical Sciences Department has no control over the selection of those advertisement choices.

- **CS #1 – Rational Exponents and nth Root Expressions**

Simplifying a radical expression using rational exponents. This solution converts the radical into a fractional exponent, then distributes the exponents through all terms.

<https://youtu.be/sBvRJUwXJPo> (4:25 minutes)

Simplifying cube roots, exponent expressions and equations. This method involves finding the cubes within the example, then simplifying each term.

<https://youtu.be/KBP5EKcG1s4> (5:24 minutes)

- **CS #2 – Solving Linear and Quadratic Equations**

Solving linear equations with variable expressions in the denominators of fractions

<https://youtu.be/9IUEk9fn2Vs> (7:38 minutes)

How to solve quadratic equations by factoring

<https://youtu.be/Z5MnP9da4EM> (11:10 minutes)

- **CS #3 – Solving Rational Expressions**

Simplifying rational expressions: common monomial factors

<https://youtu.be/XFwQV-KCudw> (6:58 minutes)

Rational Expressions: Adding and Subtracting

<https://youtu.be/XTZI7Kn6u4Y> (3:09 minutes)

- **CS #4 – Coordinate Geometry**

Coordinate Geometry. This video is an excellent overview of coordinate geometry. The instructor relates the number line to the x y plane. Then plots linear equations.

<https://youtu.be/pfGFwIX-yAk> (57:48 minutes)

Finding the equation of a line from two points. Slope and y intercept method

<https://youtu.be/1wekohJ5nqA> (2:52 minutes)

Finding the equation of a line perpendicular to a given line passing through a given point

<https://youtu.be/H98iBqt1fFQ> (5:10 minutes)

- **CS #5 – Functions**

What is a function? This video defines functions and shows their respective graphs

<https://youtu.be/kvGslo1TmsM> (7:56 minutes)

Composite functions and their domains

<https://youtu.be/1RFwSXXVDKk> (13:55 minutes)

- **CS #6 – Trigonometry**

This trigonometry video tutorial provides a basic introduction into radians and degrees.

It explains the definition of the radian and how to calculate the angle measure in radians

given the arc length of a circle and the length of the radius. Also includes converting degrees to radians and radians to degrees.

<https://youtu.be/JmLN3QxshlE> (18:54 minutes)

Basic trigonometry, includes the use of SOH CAH TOA

<https://youtu.be/Jsiy4TxglME> (9:16 minutes)

How to do inverse trig functions - arcsin, arccos, arctan

<https://youtu.be/y3LajBcnb7s> (10:41 minutes)

- **CS #7– Exponential and Logarithmic Functions**

How to solve logarithmic equations

<https://youtu.be/Kv2iHde7Xgw> (4:12 minutes)

Rules of Logarithms to remember

<https://youtu.be/bPLYCH1WaEY> (4:30 minutes)

Fundamentals of exponential equations

<https://youtu.be/dV9kU7dwesE> (7:08 minutes)

- **CS #8 – Systems of Equations**

Use of the substitution method to solve a system of linear equations

<https://youtu.be/YriMMWbndn0> (18:29 minutes)

How to solve simultaneous equations using the elimination method

https://youtu.be/7Ja_H6a8ltY (10:41 minutes)