

## Video Links for Matrix Operations

### Day #1

#### Matrix Addition and Subtraction

[https://www.youtube.com/watch?v=-KU\\_FriVVQs](https://www.youtube.com/watch?v=-KU_FriVVQs)

#### Matrix Scalar Multiples

<https://www.khanacademy.org/math/precalculus/precalc-matrices/multiplying-matrices-by-scalars/v/scalar-multiplication>

#### Identity Matrix

<https://www.khanacademy.org/math/precalculus/precalc-matrices/properties-of-matrix-multiplication/v/identity-matrix>

### Day #2

#### Matrix Multiplication

<https://www.khanacademy.org/math/precalculus/precalc-matrices/multiplying-matrices-by-matrices/v/matrix-multiplication-intro>

watch this one too...

[https://www.youtube.com/watch?v=kuixY2bCc\\_0](https://www.youtube.com/watch?v=kuixY2bCc_0)

#### Matrices and the Distributive Property

<https://www.khanacademy.org/math/linear-algebra/matrix-transformations/composition-of-transformations/v/distributive-property-of-matrix-products>

#### Matrices and the Commutative Property

<https://www.khanacademy.org/math/precalculus/precalc-matrices/properties-of-matrix-multiplication/v/commutative-property-matrix-multiplication>

#### Matrices and the Associative Property

<https://www.khanacademy.org/math/precalculus/precalc-matrices/properties-of-matrix-multiplication/v/associative-property-matrix-multiplication>

#### Matrices and the determinant

2x2 matrix

<https://www.khanacademy.org/math/precalculus/precalc-matrices/determinant-of-2x2-matrix/v/finding-the-determinant-of-a-2x2-matrix>

3x3 matrix

<https://www.youtube.com/watch?v=21LWuY8i6Hw>

Sal's shortcut...

<https://www.khanacademy.org/math/algebra-home/alg-matrices/alg-determinants-and-inverses-of-large-matrices/v/finding-the-determinant-of-a-3x3-matrix-method-1>

### **Day #3**

#### Matrices and their Inverses

<https://www.khanacademy.org/math/precalculus/precalc-matrices/intro-to-matrix-inverses/v/inverse-matrix-part-1>

<https://www.youtube.com/watch?v=w2t9VADaw10>

#### Using Inverses to Solve Systems

<https://www.youtube.com/watch?v=Re1F4d24Fxc>

#### Videos for Using a Calculator

##### Solving Systems

[https://www.youtube.com/watch?v=boK\\_8kkYLCA](https://www.youtube.com/watch?v=boK_8kkYLCA)

##### Finding a determinant

[https://www.youtube.com/watch?v=Z5B\\_fN1UNjU](https://www.youtube.com/watch?v=Z5B_fN1UNjU)

##### Finding an inverse

[https://www.youtube.com/watch?v=\\_ffj4NbLcTU](https://www.youtube.com/watch?v=_ffj4NbLcTU)