

## MATH 125

For general introduction to the following topics, visit the indicated sites from KHAN ACADEMY and MATH TV. (NOTE: sometimes the links branch out into further detailed subtopics and some links merge other topics as well.)

### For KHAN ACADEMY:

- graphing linear equations (point-slope and standard form) and solving inequalities via graphing (inequalities in two variables)  
<http://www.khanacademy.org/math/algebra/#linear-equations-and-inequalitie>
- distance and midpoint formula, exponential growth and decay, along with other topics  
<http://www.khanacademy.org/math/algebra/#ck12-algebra-1>
- geometry (circles, angles, triangles)  
<http://www.khanacademy.org/math/geometry/#>
- functions (introduction to linear, quadratic, domain, range, inverse, applying and graphing)  
<http://www.khanacademy.org/math/algebra/#algebra-functions>
- quadratic functions (factoring, solving, completing the square)  
<http://www.khanacademy.org/math/algebra/#quadratics>
- polynomials (arithmetic, factoring, GCF, solving)  
<http://www.khanacademy.org/math/algebra/#polynomials>
- complex numbers  
<http://www.khanacademy.org/math/algebra/#complex-numbers>
- logarithmic functions  
<http://www.khanacademy.org/math/algebra/#logarithms>
- trigonometry (unit circle, law of sines and cosines, inverse trigonometry, graphing)  
<http://www.khanacademy.org/math/trigonometry/#math/trigonometry>
- system of linear equations and inequalities  
<http://www.khanacademy.org/math/algebra/#systems-of-eq-and-ineq>
- systems of non-linear equations  
<http://www.khanacademy.org/math/algebra/#conic-sections>

### For MATH TV:

Go to [http://www.mathtv.com/videos\\_by\\_topic](http://www.mathtv.com/videos_by_topic). On the left-hand side of the page, under “Select a Topic”, click on “Algebra” to watch videos on the following topics:

1. Properties of Numbers
2. Positive and Negative Numbers
3. Simplifying Expressions

4. Linear Equations in 1 Variable
5. Linear Equations in 2 variables (Straight Lines)
6. Functions
7. Exponents
8. Polynomials
9. Scientific Notations
10. Factoring
11. Rational Expressions
12. Roots and Radicals
13. Quadratic Equations
14. Formulas
15. Inequalities
16. Word Problems
17. Logarithms
18. Systems of Equations
19. Graphing
20. Sequences and Series
21. Variations (Direct and Indirect Relationships)

Go to [http://www.mathtv.com/videos\\_by\\_topic](http://www.mathtv.com/videos_by_topic). On the left-hand side of the page, under “Select a Topic”, click on “Trigonometry” to watch videos on the following topics:

1. Trigonometric Functions
2. Right Triangle Trigonometry
3. Radian Measure
4. Graphing and Inverse Functions
5. Identities and Formulas
6. Equations
7. Triangles
8. Complex Numbers and Polar Coordinates