| **Section\*** | **Subject** | **URL** |
| --- | --- | --- |
| 1.1 | Simplifying algebraic expressions | <https://www.youtube.com/watch?v=UrmebRfYA1I> |
| 1.2  | Multiply exponents same base | <https://youtu.be/7gZBCTw2EmI> |
| 1.2 | Divide exponents same base | <https://youtu.be/khLTbG0VB3Q> |
| 1.2 | Power Rule | <https://youtu.be/39l-MZFUEzY> |
| 1.2 | Product to a power | <https://youtu.be/kbOqDoWVJmE> |
| 1.2 | Negative exponents | <https://youtu.be/wQmtsgRMGmU> |
| 1.2 | Simplifying | <https://youtu.be/Zt2fdy3zrZU> |
| 1.3 | Simplifying square roots - multiplication | <https://www.youtube.com/watch?v=To3E7_trHKI> |
| 1.3 | Simplifying square roots - division | <https://youtu.be/PcUUM-s1g-I> |
| 1.3 | Rationalize denominator | <https://youtu.be/scdd3Xfdpeg> |
| 1.3 | Fractional exponents | <https://www.youtube.com/watch?v=lZfXc4nHooo> |
| 1.3 | Simplifying radicals with rational exponents and variables | <https://youtu.be/usKfEI7HVjg> |
| 1.4 | Adding and simplifying polynomials | <https://youtu.be/ahdKdxsTj8E> |
| 1.4 | Multiplication - area model | <https://www.youtube.com/watch?v=_PC1JMBZKUQ> |
| 1.5 | Factoring out GCF | <https://youtu.be/EtK6oifcVOI> |
| 1.5 | Factoring by grouping | <https://youtu.be/zwM791G2WZA> |
| 1.5 | Factoring a quadratic by grouping | <https://youtu.be/0XyDCZ5YD1c> |
| 2.1 | Graph a line using a table | <https://youtu.be/iUNVGRVFv6E> |
| 2.2 | Linear equations | <https://www.youtube.com/watch?v=VN5vjS_oA_c> |
| 2.2 | Linear equations with fractions  | <https://youtu.be/snVp-EXiNB4> |
| 2.2 | Classifying linear equations | <https://youtu.be/gD6CUY54xIk> |
| 2.2 | Rational equations | <https://www.youtube.com/watch?v=6eqgIZyXgK8> |
| 2.4 | Evaluating square root with negatives | <https://youtu.be/s03qez-6JMA> |
| 2.4 | Adding complex numbers | <https://youtu.be/SfbjqVyQljk> |
| 2.5 | Zero product property | <https://youtu.be/96uFG5aVF70> |
| 2.5 | Solve by factoring | <https://youtu.be/2ZzuZvz33X0> |
| 2.5 | Solve using square root property | <https://youtu.be/55G8037gsKY> |
| 2.5 | Solve by completing the square | <https://youtu.be/hg-NRJUT47E> |
| 2.5 | Solve by quadratic formula | <https://youtu.be/iulx0z1lz8M> |
| 2.6  | Absolute value equations | <https://youtu.be/u6zDpUL5RkU?t=64> |
| 2.7 | Inequality with < | <https://youtu.be/iI_2Piwn_og?start=379&end=606> |
| 2.7 | Inequality with > | <https://youtu.be/iI_2Piwn_og?t=615> |
| 2.7 | Linear inequality | <https://www.youtube.com/watch?v=CHPfqdFlhtg> |
| 2.7 | Compound linear inequality | <https://www.youtube.com/watch?v=A3xPhzs-KBI> |
| 7.1 – IA2 | Rational inequality | <https://www.youtube.com/watch?v=gfnVHwhEe6U> |
| 7.1 – IA2 | Simplifying rational expressions | <https://youtu.be/x6XyP2_RfA4> |
| 7.1 – IA2 | Domain of rational function | <https://youtu.be/D-dRz-ebr-E> |
| 7.1 – IA2 | Multiplying rational expressions | <https://youtu.be/MJaGrODQr1U> |
| 7.1 – IA2 | Dividing rational expressions | <https://youtu.be/XvJq5kfKpAM> |
| 7.1 – IA2 | Subtracting rational expressions | <https://youtu.be/d3xr5a4cln0> |
| 3.1 | Function characteristics | <https://youtu.be/NqvLjFixJYc> |
| 3.1 | Domain of a rational function | <https://www.youtube.com/watch?v=He96RPafUj0> |
| 3.1 | Evaluating algebraic expressions | <https://youtu.be/UrmebRfYA1I> |
| 3.1 | Evaluating functions | <https://youtu.be/hqFeeQkcSVE> |
| 3.1 | Evaluating functions from a graph | <https://youtu.be/gPV0mDBdC_Y> |
| 3.1 | Is a relation a function | <https://youtu.be/exmYLRVOk1w> |
| 3.1 | Is an equation a function | <https://youtu.be/VH2dqWURArg> |
| 3.1 | Is a graph a function | <https://youtu.be/xkq58a7bKXs> |
| 3.2 | Domain and range from a graph | <https://youtu.be/3ora9miqtSw> |
| 3.3 | Rate of change of a function | <https://youtu.be/f--OpbZhuKs> |
| 3.3 | Intervals of increase and decrease | <https://youtu.be/zOw9kJljiZI> |
| 3.3 | Extrema with tech 1 (TI) | <https://www.youtube.com/watch?v=qc39p3_H9kY> |
| 3.3 | Extrema with tech 2 (Desmos) | <https://www.youtube.com/watch?v=iIMNdCJmiY0> |
| 3.4 | Add/subtract functions | <https://youtu.be/oaUjQvSnh_c> |
| 3.4 | Multiply/divide functions | <https://youtu.be/MhftcqQK9A4> |
| 3.4 | Composing functions | <https://www.youtube.com/watch?v=S4AEZElTPDo> |
| 3.4 | Evaluate using graphs | <https://youtu.be/oORnGaJp1pk> |
| 3.4 | Evaluate using table | <https://youtu.be/FR8JH6IldsE> |
| 3.4 | Evaluate algebraically | <https://youtu.be/lxtlwnCV-HM> |
| 3.4 | Domain | <https://youtu.be/_zy7Uro7iCg> |
| 3.4 | Decomposing | <https://youtu.be/NmfaC7etZms> |
| 3.5 | Even and odd | <https://youtu.be/oKKcIK_PgEk?t=81> |
| 3.5 | Horizontal and vertical translations | <https://www.youtube.com/watch?v=RttvubuBhAE> |
| 3.5 | Reflections | <https://www.youtube.com/watch?v=mR2y_kohZIw> |
| 3.5 | f(x) in terms of transformed g(x) | <https://www.youtube.com/watch?v=ENFNyNPYfZU> |
| 3.5 | Transformation of quadratic | <https://youtu.be/g0eq9bveB5E> |
| 3.5 | Transformation of absolute value | <https://youtu.be/4R9evQO6J6c> |
| 3.7 | Verifying inverses | <https://youtu.be/8GEGnSEJA2s> |
| 3.7 | Evaluate inverse with table | <https://youtu.be/94uNbMYfLyA> |
| 3.7 | Evaluate inverse with graph | <https://youtu.be/ZUn-wpUKTgE> |
| 3.7 | Finding inverse | <https://youtu.be/wSiamij_i_k> |
| 3.7 | Finding inverse (rational) | <https://youtu.be/VzWxvDe8TUQ> |
| 3.7 | Finding inverse graph | <https://youtu.be/B7evP9H4jY0> |
| 4.1 | Slope from a graph | <https://youtu.be/R948Tsyq4vA> |
| 4.1 | Slope from a table | <https://youtu.be/XR-TB7NZNtI> |
| 4.1 | Slope from two points | <https://youtu.be/IlCoW3CXlwg> |
| 4.1 | Equation given m and a point | <https://youtu.be/YUT0wiYrm6g> |
| 4.1 | Equation from a table | <https://youtu.be/NnVqsuDVyrE> |
| 4.1 | Equations given 2 points | <https://youtu.be/lXNxdIv3FoA> |
| 4.1 | Using m and b | <https://youtu.be/jdW1X2BYjo0> |
| 4.1 | Equation from a graph | <https://youtu.be/4vtpOr25ul8> |
| 4.1 | Graph given intercepts | <https://youtu.be/U4Ftc0fuAsM> |
| 4.1 | Graph with intercept method | <https://youtu.be/dv0MpAIi0f0> |
| 4.1 | Horizontal and vertical lines | <https://youtu.be/1ZiQ7gC9h9c> |
| 4.1 | Parallel and perpendicular lines  | <https://youtu.be/II8J-GEYrgM> |
| 4.2 | Word problems | <https://youtu.be/BR7MJpvUL0Q> |
| 5.1 | Properties of quadratic graphs | <https://www.youtube.com/watch?v=H46QVUdbBn0> |
| 5.1 | Write a quadratic in standard form | <https://www.youtube.com/watch?v=IoSRKuq10Tc> |
| 5.1 | Quadratic application - area | <https://youtu.be/RGmhamal7T0> |
| 5.1 | Quadratic application - minimum | <https://youtu.be/j13yT725QTs> |
| 11.1 – IA2 | Equation from center and radius | <https://www.youtube.com/watch?v=iX5UgArMyiI> |
| 11.1 – IA2 | General form of a circle | <https://youtu.be/0szztGXCSnE> |
| 11.1 – IA2 | Using distance formula | <https://www.youtube.com/watch?v=0IOEPcAHgi4> |
| 11.1 – IA2 | Using midpoint formula | <https://www.youtube.com/watch?v=8lln-wsg0rU> |
| 5.2 | Degree, leading term, leading coefficient | <https://www.youtube.com/watch?v=F_G_w82s0QA> |
| 5.3 | Turning points and degree | <https://www.youtube.com/watch?v=Fs9wYJAWSk8> |
| 5.3 | End behavior | <https://www.youtube.com/watch?v=DEFVgPS3tO0> |
| 5.3 | Even/Odd degree, leading coefficient, end behavior | <https://www.youtube.com/watch?v=LanLJc4itI4> |
| 5.3 | Leading Coefficient Test | <https://www.youtube.com/watch?v=WU4sufdUHqY> |
| 5.3 | Degree & Turning Points | <https://www.youtube.com/watch?v=jzn8FL-_CoE> |
| 5.3 | Zeros | <https://www.youtube.com/watch?v=6ONgEmXJxw4> |
| 5.3 | Zero + Multiplicities | <https://youtu.be/FIVQdH0YdHk> |
| 5.3 | Properties of polynomials  | <https://youtu.be/5Ks9m6Xm3jE> |
| 5.3 | Equation from graph 1 | <https://youtu.be/ASwOZYbfBjI> |
| 5.3 | Equation from graph 2 | <https://youtu.be/rYf2_PtmfYg> |
| 5.3 | Intermediate Value Theorem | <https://www.youtube.com/watch?v=6AFT1wnId9U> |
| 5.4 | Polynomial long division | <https://www.youtube.com/watch?v=8lT00iLntFc> (3 examples) |
| 5.4 | Synthetic division (1) | <https://www.youtube.com/watch?v=1byR9UEQJN0> |
| 5.4 | Synthetic division (2) | <https://www.youtube.com/watch?v=FxHWoUOq2iQ> (multiple examples) |
| 5.5 | Remainder theorem to evaluate | <https://www.youtube.com/watch?v=aF2YeRWxSwI> |
| 5.5 | Factor theorem | <https://www.youtube.com/watch?v=rP-__zFngio> |
| 5.5 | Rational zero theorem | <https://www.youtube.com/watch?v=W9OBqw2JLpE> |
| 5.5 | Zeros of poly | <https://www.youtube.com/watch?v=m8y4BIDwreM> |
| 5.6 | Arrow notation | <https://youtu.be/ORga2Ooxfvw?t=75> |
| 5.6 | Domain rational function | <https://www.youtube.com/watch?v=He96RPafUj0> |
| 5.6 | Vertical asymptotes & removable discontinuities (1) | <https://www.youtube.com/watch?v=eKW-m_iI2nQ> |
| 5.6 | Vertical asymptotes & removable discontinuities (1) | <https://www.youtube.com/watch?v=mvMNC8wDYYI> |
| 5.6 | Horizontal & slant asymptotes | <https://youtu.be/kvhpu1TkSjI> |
| 5.6 | Domain & range of rational function | <https://www.youtube.com/watch?v=zhWr0gby02A> |
| 5.6 | Graphing rational functions (1) | <https://youtu.be/E1fCj5um8_c> |
| 5.6 | Graphing rational functions (2) | <https://www.youtube.com/watch?v=fy45qX8cUwQ> |
| 5.6 | Graphing rational functions (3) | <https://www.youtube.com/watch?v=hWjMovgqvi4> |
| 6.1 | ID linear vs exponential | <https://www.youtube.com/watch?v=_vlXdx-CqM0> |
| 6.1 | ID linear vs exponential application (table) | <https://www.youtube.com/watch?v=721RrH6auoU> |
| 6.1 | Evaluating exponential functions | <https://www.youtube.com/watch?v=GQIcZeKR9RI> |
| 6.1 | Domain, range, asymptote | <https://youtu.be/f1xfyW1Laug> |
| 6.1 | Finding exponential functions | <https://youtu.be/WcQL0-R15xA> |
| 6.1 | Compound interest | <https://www.youtube.com/watch?v=OQ9Mv2jwQWo> |
| 6.1 | Continuous compounding | <https://www.youtube.com/watch?v=Ln97Hd7AiDc> |
| 6.2 | Graphing exponential functions  | <https://youtu.be/9SOSfRNCQZQ>  |
| 6.2 | Graphing with shift and scale | <https://www.youtube.com/watch?v=2I6UpymhBio>  |
| 6.2 | Graphing with reflection and shift | <https://www.youtube.com/watch?v=3sCF7c6G3Y8> |
| 6.3 | Logarithmic to exponential | <https://www.youtube.com/watch?v=f0C1KL7GkqY> |
| 6.3 | Exponential to logarithmic | <https://www.youtube.com/watch?v=LcuwFVotNAk> |
| 6.3 | Logarithms without calculator | <https://youtu.be/xdBqRQwmlAY> |
| 6.3 | Using common log | <https://youtu.be/cUXJ6j7jWz0> |
| 6.3 | Using natural log | <https://youtu.be/daUlTsnCNRQ> |
| 6.4 | Domain of log function | <https://youtu.be/CzIDFP37J8Y> |
| 6.4 | Graphing log functions | <https://youtu.be/DuYgVVU_BwY> |
| 6.4 | Graphing log functions | <https://youtu.be/a6DEkyoF-Gc> |
| 6.4 | Graphing with transformations | <https://youtu.be/2Vvs9hU3pBI>  |
| 6.4 | Vertical asymptote | <https://www.youtube.com/watch?v=78tnNYNISOc> |
| 6.4 | Equation from graph and base function | <https://www.youtube.com/watch?v=du2m-vz8HOg> |
| 6.5 | Product Rule | <https://www.youtube.com/watch?v=nPzQdZLS7DQ> |
| 6.5 | Quotient Rule | <https://youtu.be/NUM464vZfLY> |
| 6.5 | Power Rule | <https://youtu.be/Pb9V374iOas> |
| 6.5 | Expanding | <https://www.youtube.com/watch?v=OIz-5MyJA3g> |
| 6.5 | Condensing | <https://youtu.be/luRrOlsB4cY> |
| 6.5 | (It's all about that) Change of base | <https://youtu.be/FFm-zaFW_X4> |
| 6.6 | Solving exponential equation, same base | <https://youtu.be/ZQCc_ssQhpQ> |
| 6.6 | Solving exponential equation, same base | <https://youtu.be/E8E-tmwaR_E> |
| 6.6 | Solve exp equations with logs (1) | <https://www.youtube.com/watch?v=R443Db-wJ5o> |
| 6.6 | Solve exp equations with logs (2) | <https://youtu.be/6YtWTfAYLkw> |
| 6.6 | Solving logarithmic equation, definition | <https://youtu.be/F864AtAYRL0> |
| 6.6 | Solving logarithmic equation, definition | <https://youtu.be/g3gxPXmhKP0> |
| 6.6 | Solve log equations with definition | <https://youtu.be/5UxMejLb5Xg> |
| 6.6 | Solve log equations with 1-1 property (1) | <https://youtu.be/O6r9nxNePJQ> |
| 6.6  | Solve log equations with 1-1 property (2) | <https://youtu.be/tIvBzTB6EDQ> |
| 6.6 | Applications | <https://youtu.be/hPvJ4h0frpo> |
| 6.7 | Continuous exponential decay | <https://www.youtube.com/watch?v=HnHCQ2X_meg> |
| 6.7 | Bacteria growth | <https://www.youtube.com/watch?v=C4um47OQwQ4> |
| 6.7 | Radioactive decay | <https://www.youtube.com/watch?v=9OCyrf-tqxs> |
| 6.7 | Choose a model | <https://youtu.be/I8SEonIIRUo> |
| 7.1 | Standard position (degrees) | <https://www.youtube.com/watch?v=7elYxUz7dDI> |
| 7.1 | Radian/degree conversion | <https://youtu.be/z8vj8tUCkxY> |
| 7.1 | Find coterminal angles | <https://youtu.be/6BRtPfofXog> (several examples) |
| 7.1 | Arc length, degrees | <https://www.youtube.com/watch?v=agm6kN2VLjA> |
| 7.1 | Arc length, radians | <https://www.youtube.com/watch?v=axGgnXyuiTg> |
| 7.1 | Arc length, application | <https://www.youtube.com/watch?v=qp0cATM2yys> |
| 7.1 | Area of sector | <https://www.youtube.com/watch?v=x3qu3osclLk> |
| 7.1 | Arc length & area of a circle, application | <https://www.youtube.com/watch?v=zD4CsKIYEHo> |
| 7.2 | sin, cos, tan from right triangles | <https://www.youtube.com/watch?v=O74LFU4VmlE> |
| 7.2 | 6 trig functions from right triangle | <https://www.youtube.com/watch?v=1T8GTY4_gzo> |
| 7.2 | Exact values  | <https://youtu.be/dVVTXQnnKic>  |
| 7.2 | Unknown sides | <https://www.youtube.com/watch?v=N16oOPVsuhw> |
| 7.2 | Angle of elevation (1) | <https://www.youtube.com/watch?v=YBC3RMj8w3A> |
| 7.2 | Angle of elevation (2) | <https://www.youtube.com/watch?v=K-LQNIAOEJU> |
| 7.3  | sine and cosine using unit circle | <https://youtu.be/d12NQ0_1Sxw> |
| 7.3 | Using Pythagorean identity (1) | <https://youtu.be/soIt2TwV6Xk> |
| 7.3 | Using Pythagorean identity (2) | <https://youtu.be/ts8myu_eltw> |
| 7.3 | Finding reference angles | <https://www.youtube.com/watch?v=dBN7wFrebwY> |
| 7.3 | Using reference angles to eval trig functions (degrees) | <https://www.youtube.com/watch?v=eh_rN2N-niE> |
| 7.3 | Using reference angles to eval trig functions (radians & degrees) | <https://www.youtube.com/watch?v=O_I4l7APp5M> |
| 7.3 | Evaluate trig functions with reference angles | <https://www.youtube.com/watch?v=ZmeBClywgsM> |
| 7.4 | All 6 trig functions | <https://www.youtube.com/watch?v=fow7m2r_Q7s> |
| 7.4 | Reference angles for sec, csc, cot | <https://www.youtube.com/watch?v=nxZ65c1Zp3A> |
| 7.4 | Using trig parity (several examples) | <https://youtu.be/5p8hokJ3Cqo> |
| 7.4 | Trig identities (sec, csc, cot) | <https://www.youtube.com/watch?v=T9iaBr-YV60> |
| 7.4 | trig functions in given quadrant (1) | <https://youtu.be/nTR68IJYdfY> |
| 7.4 | trig functions in given quadrant (2) | <https://youtu.be/L2tNxfipfoQ> |
| 7.4 | Trig functions with calculator | <https://www.youtube.com/watch?v=W0fBQM8YC-Q> |
| 8.1 | Period and amplitude (1) | <https://youtu.be/ODqIIITb9cM> |
| 8.1  | Period and amplitude (2) | <https://youtu.be/j7J_Gid7nKg> |
| 8.1 | Period, amplitude, phase shift, midline | <https://youtu.be/iEbF1aa0Qps> (several examples) |
| 8.1 | Graphing with phase shifts & amplitude | <https://youtu.be/k_ATTPftWSk> |
| 8.1 | Graphing with transformations | <https://www.youtube.com/watch?v=ftm3Z8Qn4VU> |
| 8.2 | Graphing tangent | <https://www.youtube.com/watch?v=r5ylTOlzGEs> |
| 8.2 | Equation of tangent from graph | <https://www.youtube.com/watch?v=x_yn02gwnPA> |
| 8.2 | Graphs of sec, csc  | <https://www.youtube.com/watch?v=AGe2-EG8ZDU> (several examples) |
| 8.2 | Graphing sec from cos | <https://www.youtube.com/watch?v=62N7ECNonMM> |
| 8.2 | Domain, range csc | <https://youtu.be/3RVprOA3FvY> |
| 8.2 | Phase shift, period of (tangent and) cotangent | <https://youtu.be/ehW6uY-1eLw?t=107> |
| 8.2 | Graphing cot | <https://www.youtube.com/watch?v=vkbtkWSYsx4> |
| 8.3 | arccos example | <https://www.youtube.com/watch?v=pU0p-YplI-Y> |
| 8.3 | arcsin example | <https://www.youtube.com/watch?v=2ZHN2k9wmAs> |
| 8.3 | inverse trig on calculator | <https://www.youtube.com/watch?v=nPeDoGwtPNc> |
| 8.3 | composing (basic) | <https://youtu.be/pWdGu9E5nCE> |
| 8.3 | composing f^-1(g) (1) | <https://www.youtube.com/watch?v=tQeqXmD_Fho> |
| 8.3 | composing f^-1(g) (2) | <https://www.youtube.com/watch?v=NyRB5ji1J38> |
| 8.3 | composing f(g^-1) (1) | <https://www.youtube.com/watch?v=n8riZRrRW_4> |
| 8.3 | composing f(g^-1) (2) | <https://www.youtube.com/watch?v=k78UGDF9hzs> |
| 9.1 | Simplifying using trig identities (1) | <https://youtu.be/4OEeVLo5V1o> |
| 9.1 | Simplifying using trig identities (2) | <https://youtu.be/Jx6zJUbWJKY> |
| 9.2 | Sum & difference - sin with degrees | <https://youtu.be/y5jNI16xX7g> |
| 9.2 | Sum & difference - cos with radians | <https://youtu.be/liSgx_72bfg> |
| 9.2 | Sum & difference - tan with radians | <https://youtu.be/42zwvQFIfGI> |
| 9.2 | Sum & difference - tan with degrees | <https://youtu.be/6LE8DmmXrig> |
| 9.2 | Using cofunctions (degrees) | <https://youtu.be/KAQNIHyr6q4> |
| 9.2 | Using cofunctions (radians) | <https://youtu.be/g6sQX5wm9Wc> |
| 9.3 | Double angle formulas | <https://youtu.be/7Eo-fuy0f7g> |
| 9.3  | Power reducing formulas | <https://youtu.be/4bP1FuASneY> |
| 9.3 | Half-angle - sin with radians | <https://youtu.be/Xlel4XLomn4> |
| 9.3 | Half-angle - sin with degrees | <https://youtu.be/oMLYwrtkFpQ> |
| 9.3 | Half-angle - cos with radians | <https://youtu.be/q0RWzdgr8C8> |
| 9.3  | Half-angle tan | <https://youtu.be/4B3g1lEeU6Q> |
| 9.5 | Basic solve trig equation | <https://youtu.be/j7c2I_fwamc> |
| 9.5 | Solve tan equation (1) | <https://youtu.be/CrayigBVBZo> |
| 9.5  | Solve tan equation (2) | <https://youtu.be/osttxV-t8xk> |
| 9.5  | Solve csc equation  | <https://youtu.be/LlV6DFJK5DY> |
| 9.5 | Solve trig equation with calculator | <https://youtu.be/tIzG2u7jN-8> |
| 9.5 | Trig equation in quadratic form (1) | <https://youtu.be/ZkK4ifsQoGk> |
| 9.5  | Trig equation in quadratic form (2) | <https://youtu.be/Hj3pBcf_ZfA> |
| 9.5 | Solve using identities (1) | <https://youtu.be/qFLDHQgY7eA> |
| 9.5 | Solve using identities (several examples) | <https://youtu.be/Qk2v7zngL48> |
| 9.5 | Solve trig equations with multiple angles | <https://youtu.be/eZPEW2hVUd0> (several examples) |
| 9.5 | Right triangle application problem | <https://youtu.be/RnqQWs4P20U> |
| 10.1 | Solve triangle (1) | <https://youtu.be/VjmFKle7xIw> |
| 10.1 | Solve triangle (2) | <https://youtu.be/yC0Dmbge8Xs> |
| 10.1 | Solve ambiguous case | <https://youtu.be/S1oDtGHC2iA> |
| 10.1 | Area of triangle | <https://youtu.be/MiiP3FAcc8w> |
| 10.1 | Law of sines application | <https://youtu.be/gA6g5xfSQVI> |
| 10.2 | Solve triangle | <https://youtu.be/ZElOxG7_m3c> |
| 10.2 | Law of cosines application | <https://youtu.be/fA7aGoK5FNo?t=203> |
| 10.2 | Area with Heron's | <https://youtu.be/-YI6UC4qVEY> |
| 10.3 | Graph polar coordinates | <https://youtu.be/k5dtjlgIiwY> |
| 10.3 | Polar -> rectangular points | <https://youtu.be/V1iK7X4iGZU> |
| 10.3 | Rectangular -> Polar points | <https://youtu.be/u_BOn-q7KGs> |
| 10.3 | Rectangular -> Polar equations | <https://youtu.be/JeUwlgm9GH8> |
| 10.3 | Polar -> Rectangular equations | <https://youtu.be/7Xoub1BHb6o> (several examples) |
| 10.3 | Graphing polar equations | <https://youtu.be/SQtvUue496g> |
| 11.1 | Check solutions of systems of linear equations | <https://www.youtube.com/watch?v=EvsPI9kdJek> |
| 11.1 | Solve systems of linear equations by graphing | <https://www.youtube.com/watch?v=Pd4hwS8qHms> |
| 11.1 | Graphing systems of linear equations | <https://youtu.be/hjigR_rHKDI> |
| 11.1 | Solve systems of linear equations by substitution | <https://www.youtube.com/watch?v=uzyd_mIJaoc> |
| 11.1 | Solve systems of linear equations by addition (elimination) | <https://www.youtube.com/watch?v=0P0SCQf-hWQ> |
| 11.1 | Applications of systems of linear equations | <https://www.youtube.com/watch?v=z1hz8-Kri1E> |
| 11.3 | Elimination in systems of nonlinear equations (linear & quadratic) | <https://youtu.be/swFohliPgmQ> |
| 11.3 | Elimination in systems of nonlinear equations (2 quadratics) | <https://youtu.be/XPf8LMu7QSw> |
| 11.3 | Addition in systems of nonlinear equations | <https://www.youtube.com/watch?v=crU_MfperB0> |
| 11.3 | Substitutions in systems of nonlinear equations | <https://www.youtube.com/watch?v=hrhQCsCR6_U> |
| 11.5 | Dimension of a matrix | <https://youtu.be/ilFJYjfKYjk> |
| 11.5 | Entries in a matrix | <https://youtu.be/ddx4IXCut5I> |
| 11.5 | Adding/subtracting matrices | <https://youtu.be/WR9qCSXJlyY> |
| 11.5 | Scalar multiplication with addition/subtraction | <https://youtu.be/iJERwUVuwtY> |
| 11.5 | Matrix multiplication | <https://youtu.be/OMA2Mwo0aZg> |
| 11.5 | Matrix operations via calculator | <https://youtu.be/A6W_E5Cl4dA> |
| 11.6 | Augmented matrix from system | <https://youtu.be/A_fIRE0NJ8Y> |
| 11.6 | Matrix to REF | <https://youtu.be/vqzBeXuVr_A> |
| 11.6 | Solve system with matrix | <https://youtu.be/cKzYDkZQzqQ> |
| 11.6 | System on calculator | <https://youtu.be/zhypLK9nK80> |
| 11.6 | Applications | <https://youtu.be/ZYWVxEscElo> |
| 12.1 | Ellipse in standard from with foci | <https://youtu.be/1ba4DaKxM94> |
| 12.1 | Ellipse given vertices and foci | <https://youtu.be/Duwg0QqymSo> |
| 12.1 | Ellipse equation given graph | <https://youtu.be/_JrQF8Rkaio> |
| 12.1 | Graphing ellipse | <https://youtu.be/a86uljNQDsI> |
| 12.2 | Hyperbola in standard form | <https://youtu.be/pQIGpxBl8hw> |
| 12.2 | Vertices and foci of hyperbola | <https://youtu.be/zataIe8dvgY> |
| 12.2 | Hyperbola given vertices foci | <https://youtu.be/mY8-rDNx0BI> |
| 12.2 | Graph hyperbola | <https://youtu.be/aiWyQWWMc0Y> |
| 12.2 | Equation of hyperbola given graph | <https://youtu.be/7v1koVqwXK4> |
| 12.3 | Graph sideways parabola | <https://youtu.be/nM9uyv1hEfE> |
| 12.3 | Graph parabola function | <https://youtu.be/SPs83FF5FQM> |
| 12.3 | Focus, directrix | <https://youtu.be/pe8Dm_FUpdU> |
| 12.3 | Find latus rectum | <https://youtu.be/qe-vV_5IEeU> |
| 12.3 | Parabola equation from graph | <https://youtu.be/dLca6AMYg_M> |
| 12.3 | Equation of parabola given focus, directrix | <https://youtu.be/MpWP096ctic> |
| 12.3 | Graphing parabolas 1 | <https://youtu.be/Av9DodBiiEo> |
| 12.3 | Graphing parabolas 2 | <https://youtu.be/7QMoNY6FzvM> |
| 12.3 | Equation from graph | <https://youtu.be/okXVhDMuGFg> |

\*Section refers to Jay Abramson’s OpenStax [Algebra and Trigonometry](https://openstax.org/details/books/algebra-and-trigonometry) unless indicated by IA2, which denotes the text is Abramson’s OpenStax [Intermediate Algebra 2e](https://openstax.org/details/books/intermediate-algebra-2e).