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| **Topic** | **Lesson Video Link** | **Sample Problem**  |
| **Unit 1: Quadratics** |
| 1 – Greatest Common Factor | <https://youtu.be/2MNg0GVhL18> | Model problem at 6:39 in the lesson video |
| 2 – Factoring Quadratics | <https://youtu.be/tMwojgmyoak> | Model problem at 1:59 in the lesson video |
| 3 – Borrow & Payback | <https://youtu.be/5JSZ4nzDax4> | Model problem at 0:22 in the lesson video |
| 4 – Solving Quadratics | <https://youtu.be/bmmWMSMhbR8> | Model problem at 1:38 in the lesson video |
| 5 – Simplifying Radicals | <https://youtu.be/VtN3_KoQRco> | Model problem at 0:45 in the lesson video |
| 6 – Quadratic Formula | <https://youtu.be/siiz92w11kw> | Model problem at 1:01 in the lesson video |
| 7 – Complex Roots | <https://youtu.be/WZ2Ie4e7KvE> | Model problem at 3:59 in the lesson video |
| 8 – Adding & Subtracting Complex Numbers | <https://youtu.be/qPDvHx3WM7w> | Model problem at 0:35 in the lesson video |
| 9 – Multiplying Complex Numbers | <https://youtu.be/Mf8HKearNSM> | Model problem at 2:10 in the lesson video |
| **Unit 2: Polynomials** |
| 1 – Factor by Grouping | <https://youtu.be/ddSrh-ggTdE> | Model problem at 0:27 in the lesson video |
| 2 – Solving Polynomial Equations | <https://youtu.be/Rw52x9BJZa8> | Model problem at 2:27 in the lesson video |
| 3 – Synthetic Division | <https://youtu.be/6okvgGdnEHM> | Model problem at 2:35 in the lesson video |
| 4 – Synthetic Division Part 2 | <https://youtu.be/ejWCo-ZRG1A> | Model problem at 3:52 in the lesson video |
| 5 – Remainder Theorem | <https://youtu.be/yt1-of1BzB8> | Model problem at 3:00 in the lesson video |
| 6 – Classifying Polynomials | <https://youtu.be/OzC1EbWmyl4> | Model problem at 4:21 in the lesson video |
| 7 – End Behavior | <https://youtu.be/1JccWrL963E> | Model problem at 9:54 in the lesson video |
| 8 – Polynomial Graphs | <https://youtu.be/3C_omj6Emi8> | Model problem at 7:33 in the lesson video |
| 9 – Writing Polynomial Equations | <https://youtu.be/Qa8JpfukD-Y> | Model problem at 3:00 in the lesson video |
| 10 – Rate of Change Graphically | <https://youtu.be/NhZ9L18cejU> | Model problem at 3:15 in the lesson video |
| 11 – Rate of Change from Equations | <https://youtu.be/dspvMaXxl1U> | Model problem at 5:09 in the lesson video |
| **Unit 3: Systems of Equations** |
| 1 – Elimination Method | <https://youtu.be/zz4tBqWBOf8> | Model problem at 7:51 in the lesson video |
| 2 – Three-Variable Systems | <https://youtu.be/zGileHya19c> | Model problem at 0:10 in the lesson video |
| 3 – Substitution Method | <https://youtu.be/R2UW2Lxur0c> | Model problem at 0:17 in the lesson video |
| 4 – Non-Linear Systems | <https://youtu.be/vIV9ES6P3A0> | Model problem at 0:24 in the lesson video |
| **Unit 4: Rational & Radicals** |
| 1 – Rational Equations | <https://youtu.be/bWzk9GxN5sI> | Model problem at 6:15 in the lesson video |
| 2 – Rational Equations Part 2 | <https://youtu.be/vuQeSVKqTfs> | Model problem at 4:30 in the lesson video |
| 3 – Radical Equations | <https://youtu.be/f7WkzMrhmts> | Model problem at 3:35 in the lesson video |
| 4 – Radical Equations Part 2 | <https://youtu.be/rXHOuFhJq1E> | Model problem at 5:35 in the lesson video |
| 5 – Properties of Exponents | <https://youtu.be/WDD48kghkQg> | Model problem at 0:11 in the lesson video |
| 6 – Negative Exponents | <https://youtu.be/t7LoN7dPDEc> | Model problem at 0:44 in the lesson video |
| 7 – Rational Exponents | <https://youtu.be/HJsPX2UMUO4> | Model problem at 2:10 in the lesson video |
| 8 – Exponent Rules with Rationals | <https://youtu.be/p7rKleSyhWA> | Model problem at 2:48 in the lesson video |
| **Unit 5: Exponential & Logarithmic Functions** |
| 1 – Exponential Regression |  |  |
| 2 – Exponential Functions | <https://youtu.be/zICr2B-Bwrw> | Model problem at 5:08 in the lesson video |
| 3 – Compound Interest | <https://youtu.be/qoojrcr0toE> | Model problem at 6:03 in the lesson video |
| 4 – Compound Continuously  | <https://youtu.be/1JompfBbyPk> | Model problem at 6:13 in the lesson video |
| 5 – Intro to Logarithms | <https://youtu.be/G7TJtyES0KI> | Model problem at 3:52 in the lesson video |
| 6 – Logarithmic Equations | <https://youtu.be/HI3q_M9k0zY> | Model problem at 1:36 in the lesson video |
| 7 – Change of Base Formula | <https://youtu.be/gjm5bEk80_M> | Model problem at 5:40 in the lesson video |
| 8 – Natural Logarithm | <https://youtu.be/AlOh8k2tLns> | Model problem at 4:34 in the lesson video |
| 9 – Word Problems with Logs | <https://youtu.be/dGCeGBarKNg> | Model problem at 7:12 in the lesson video |
| 10 – Word Problems with Ln | <https://youtu.be/pVmgnR4dndo> | Model problem at 6:00 in the lesson video |
| **Unit 6: Parabolas** |
| 1 – Conics Form | <https://youtu.be/qLSMpFSZwME> | Model problem at 1:48 in the lesson video |
| 2 – Vertex Form | <https://youtu.be/czHE7CJMmnY> | Model problem at 1:38 in the lesson video |
| **Unit 7: Trigonometry** |
| 1 – Trig Ratios | <https://youtu.be/exxkLjThhi8> | Model problem at 4:18 in the lesson video |
| 2 – Reciprocal Trig Ratios | <https://youtu.be/-QZybpCG0no> | Model problem at 3:42 in the lesson video |
| 3 – Inverse Trig Functions | <https://youtu.be/zl2xa7GFt6M> | Model problem at 5:50 in the lesson video |
| 4 – The Unit Circle | <https://youtu.be/yzOgPSmQ51Q> | Model problem at 9:30 in the lesson video |
| 5 – Coterminal Angles |  |  |
| 6 – Reference Angles | <https://youtu.be/yzOgPSmQ51Q> | Model problem at 3:09 in the lesson video |
| 7 – Trig Ratios from a Point | <https://youtu.be/YPTrFYST6mQ> | Model problem at 3:25 in the lesson video |
| 8 – Pythagorean Identity | <https://youtu.be/Ofo9egPD6Mg> | Model problem at 5:36 in the lesson video |
| 9 – Graphing Trig Function | <https://youtu.be/ffDjpSUlbHg> | Model problem at 1:01 in the lesson video |
| 10 – Trig Word Problems | <https://youtu.be/dmFOR5KC7g8> | Model problem at 0:12 in the lesson video |
| **Unit 8: Sequence & Series** |
| 1 – Explicit Arithmetic Sequence | <https://youtu.be/ogSlaQ0SPv4> | Model problem at 7:56 in the lesson video |
| 2 – Explicit Geometric Sequence | <https://youtu.be/GYJWSmo8kmk> | Model problem at 7:07 in the lesson video |
| 3 – Recursive Sequence | <https://youtu.be/RAEjri59kzA> | Model problem at 1:55 in the lesson video |
| 4 – Arithmetic Series | <https://youtu.be/D3oQ2bxHTyE> | Model problem at 6:03 in the lesson video |
| 5 – Geometric Series | <https://youtu.be/f5oZ_jSPk7Q> | Model problem at 5:51 in the lesson video |
| **Unit 9: Probability & Statistics** |
| 1 – Intro to Theoretical Probability | <https://youtu.be/4nuivdm-WmQ> | Model problem at 2:31 in the lesson video |
| 2 – Compound Probability | <https://youtu.be/Eoo3eutnnrw> | Model problem at 1:04 & 4:02 in the lesson video |
| 3 – Independence  |  |  |
| 4 – Conditional Probability | <https://youtu.be/qzqM7TWk-zk> | Model problem at 5:28 in the lesson video |
| 5 – Data Analysis | <https://youtu.be/f2XKf3SD2vk> | Model problem at 2:20 in the lesson video |
| 6 – Normal Distribution |  |  |
| 7 – Simulations |  |  |