| Standard | Name of skill on Khan Academy | Link to skill | Description |
| :---: | :---: | :---: | :---: |
| A-APR.B. 2 | Remainder theorem of polynomials | https://www.khanacademy.org/exercise/remainder-theorem-of-polynomials | Use the PRT (Polynomial Remainder Theorem) to determine the factors of polynomials and their remainders when divided by linear expressions. |
| A-APR.B. 3 | Using zeros to graph polynomials | https://www.khanacademy.org/exercise/using-zeros-to-graph-polynomials | Select the graph that best suits a polynomial equation by considering the zeros of the polynomial. |
| A-REI.A. 2 | Solving equations with one rational expression | https://www.khanacademy.org/exercise/linear equations_4 | Solve equations that have one rational expression whose numerator and denominator are linear expressions. |
| A-REI.A. 2 | Extraneous solutions to radical equations | https://www.khanacademy.org/exercise/extraneous-solutions-to-radicalequations | Practice some problems that involve thinking about the conditions for obtaining extraneous solutions while solving radical equations. |
| A-REI.A. 2 | Solving rational equations 2 | https://www.khanacademy.org/exercise/solving_rational equations_2 | Solve equations that have one rational expression whose numerator and denominator are polynomial expressions. |
| A-REI.D. 11 | Intersecting functions | https://www.khanacademy.org/exercise/intersecting-functions | Solve advanced and complicated equations using the power of graphs. |
| A-REI.D. 11 | Systems of nonlinear equations | https://www.khanacademy.org/exercise/systems-of-nonlinear-equations | Practice the connection between the graphical representation of equations and their algebraic solutions. |
| A-SSE.A. 2 | Factoring algebraic expressions using the distributive property | https://www.khanacademy.org/exercise/factoring_linear binomials | Factor expressions like $3 \mathrm{x}-9$ by applying the distributive property. (All expressions in this exercise are linear binomials.) |
| A-SSE.A. 2 | Factoring quadratics with a leading coefficient of 1 | https://www.khanacademy.org/exercise/factoring_polynomials 1 | Use the "sum-product" form to factor quadratics of the form $\mathrm{x}^{\wedge} 2+\mathrm{bx}+\mathrm{c}$. |
| A-SSE.A. 2 | Factoring quadrilaterals with a leading coefficient other than 1 | https://www.khanacademy.org/exercise/factoring_polynomials by_groupin | Use the grouping method to factor quadratics of the form $\mathrm{ax}{ }^{\wedge} 2+\mathrm{bx}+\mathrm{c}$. |
| A-SSE.A. 2 | Factoring quadratics 2 | https://www.khanacademy.org/exercise/factoring_polynomials 2 | Factor polynomials that can be factored as the product of a monomial and a quadratic expression, then further factor the quadratic expression. |
| A-SSE.A. 2 | Factoring difference of squares 1 | https://www.khanacademy.org/exercise/factoring difference of squares 1 | Factor quadratic expressions into the special products of the general forms $(x+a)^{\wedge} 2$, $(x-a)^{\wedge} 2$, and $(x+a)(x-a)$. |
| A-SSE.A. 2 | Nested fractions | https://www.khanacademy.org/exercise/nested-fractions | Simplify rational expressions that contain rational expressions within their numerators or denominators. |
| A-SSE.A. 2 | Factoring difference of squares 2 | https://www.khanacademy.org/exercise/factoring_difference of squares 2 | Factor quadratic expressions of the general difference of squares form: $(a x)^{\wedge} 2-b \wedge 2$. The factored expressions have the general form $(a x+b)(a x-b)$. |
| A-SSE.A. 2 | Factoring quadratics with two variables | https://www.khanacademy.org/exercise/factoring_polynomials with two - | Factor "advanced" polynomials (i.e. polynomials of various degrees and or with two variables) using quadratic factorization methods. |
| A-SSE.A. 2 | Factoring difference of squares 3 | https://www.khanacademy.org/exercise/factoring_difference of squares 3 | Factor "advanced" polynomials (i.e. polynomials of various degrees and or with twe variables) using special product factorization methods. |
| A-SSE.B. 3 | Key features of quadratic functions | https://www.khanacademy.org/exercise/rewriting-expressions-to-revealinformation | Find the $y$-intercept, the zeroes ("roots"), and the vertex of the graphs of quadratic functions. Functions are given in standard, vertex, and factored form. |
| A-SSE.B. 3 | Rewriting and interpreting exponential functions | https://www.khanacademy.org/exercise/rewriting-and-interpreting-exponential-functions | Given a modeling function, find the time interval over which the modeled quantity changes by a given factor. |
| A-SSE.B. 3 | Solving quadratics by factoring | https://www.khanacademy.org/exercise/solving_quadratics by factoring | Solve quadratic equations of the form $\mathrm{x}^{\wedge} 2+\mathrm{bx}+\mathrm{c}=0$ that can be rewritten according to their linear factors. |
| A-SSE.B. 3 | Solving quadratics by completing the square 2 | https://www.khanacademy.org/exercise/completing_the square_2 | Solve quadratic equations of the form $\mathrm{ax}{ }^{\wedge} 2+\mathrm{bx}+\mathrm{c}$ by completing the square. |
| A-SSE.B. 3 | Solving quadratics by factoring 2 | https://www.khanacademy.org/exercise/solving_quadratics by factoring_2 | Solve quadratic equations of the form $\mathrm{ax}^{\wedge} 2+\mathrm{bx}+\mathrm{c}=0$ that can be rewritten according to their linear factors |
| A-SSE.B. 3 | Finding and interpreting key features of quadratics | https://www.khanacademy.org/exercise/key-features-quadratics | Answer questions about real world situation, given the quadratic functions that model them. |
| A-SSE.B. 3 | Equivalent forms of exponential expressions | https://www.khanacademy.org/exercise/equivalent-forms-of-expressions-with-variable-exponents | Determine whether pairs of exponential expressions are equivalent. |
| A-SSE.B. 3 | Solving quadratics by completing the square 1 | https://www.khanacademy.org/exercise/completing the square_1 | Solve quadratic equations of the form $\mathrm{x}^{\wedge} 2+\mathrm{bx}+\mathrm{c}$ by completing the square. |
| A-SSE.B.3a | Key features of quadratic functions | https://www.khanacademy.org/exercise/rewriting-expressions-to-revealinformation | Find the $y$-intercept, the zeroes ("roots"), and the vertex of the graphs of quadratic functions. Functions are given in standard, vertex, and factored form. |
| A-SSE.B.3b | Completing the square in quadratic expressions | https://www.khanacademy.org/exercise/completing the square in quadrati | Practice "completing the square" with quadratic expressions. |
| A-SSE.B.3c | Rewriting and interpreting exponential functions | https://www.khanacademy.org/exercise/rewriting-and-interpreting-exponential-functions | Given a modeling function, find the time interval over which the modeled quantity changes by a given factor. |
| A-SSE.B.3c | Equivalent forms of exponential expressions | https://www.khanacademy.org/exercise/equivalent-forms-of-expressions-with-variable-exponents | Determine whether pairs of exponential expressions are equivalent. |
| A-SSE.B. 4 | Finite geometric series word problems | https://www.khanacademy.org/exercise/geometric-series | Understanding and solving problems with the formula for a finite geometric series |
| A-SSE.B. 4 | Calculating finite geometric series | https://www.khanacademy.org/exercise/geometric-series--1 | Evaluate finite geometric series given in sigma notation, recursively, or explicitly. |
| F-BF.A. 1 | Modeling with sequences | https://www.khanacademy.org/exercise/recursive explicit | Given a verbal description of a real-world relationship, determine the sequence that models that relationship. |
| F-BF.A. 1 | Modeling with composite functions | https://www.khanacademy.org/exercise/modeling-with-composite-functions | Practice composing two given basic modeling functions in order to model a more complex situation. |
| F-BF.A.1a | Modeling with sequences | https://www.khanacademy.org/exercise/recursive explicit | Given a verbal description of a real-world relationship, determine the sequence that models that relationship. |
| F-BF.A.1c | Modeling with composite functions | https://www.khanacademy.org/exercise/modeling-with-composite-functions | Practice composing two given basic modeling functions in order to model a more complex situation. |
| F-IF.B. 4 | Interpreting features of functions | https://www.khanacademy.org/exercise/interpret-features-func-2 | Match features of graphs of modeling functions to their real-world meaning. |
| F-IF.B. 4 | Interpret the end behavior of algebraic | https://www.khanacademy.org/exercise/recog-features-func-2 | Given the graph that models a real world context, answer a question about the |


|  | models |  | context that concerns the end behavior of the graph. |
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| F-IF.B. 4 | Positive and negative intervals | https://www.khanacademy.org/exercise/positive and negative parts of fur | Highlight intervals on the domain of a function where it's entirely positive or entirely negative. |
| F-IF.B. 6 | Average rate of change | https://www.khanacademy.org/exercise/avg-rate-of-change | Find the average rate of change of a function over a given interval. |
| N-RN.A. 2 | Multi-step simplification of rational exponent expressions | https://www.khanacademy.org/exercise/manipulating-fractional-exponents | Evaluate numerical expressions and simplify variable expressions with mixed exponential and radical terms, by using the properties of exponents. |
| N-RN.A. 2 | Add, subtract, multiply, and divide numerical radical terms | https://www.khanacademy.org/exercise/multiplying_radicals | Practice simplifying radical expressions with two terms. |
| N-RN.A. 2 | Simplify numerical radical expressions with multiple terms | https://www.khanacademy.org/exercise/adding_and subtracting_radicals | Practice simplifying expressions with multiple radical terms combined by addition, subtraction, multiplication, and/or division. |
| N-RN.A. 2 | Single-step simplifcation of rational exponent expressions | https://www.khanacademy.org/exercise/exponents 4 | Evaluate numerical exponential expressions and simplify variable exponential expressions by using the properties of exponents. |
| N-RN.A. 2 | Rational exponents and radicals | https://www.khanacademy.org/exercise/exponents 3 | Evaluate numerical expressions with rational exponents, and convert between equivalent forms of exponential and radical expressions. |
| S-IC.B. 3 | Types of statistical studies | https://www.khanacademy.org/exercise/types-of-statistical-studies |  |
| S-IC.B. 4 | Skills for this standard are coming soon | N/A |  |
| S-IC.B. 6 | Types of statistical studies | https://www.khanacademy.org/exercise/types-of-statistical-studies |  |

