**MCR Learning Goals**

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| **#** | **Learning Goal** | **Standard(s)** |
| MCR01 | Add, subtract, multiply and divide rational numbers and use numerical and algebraic expressions and equations to solve mathematical problems in context.  | 7.NS.1.1, 7.NS.1.2, 7.EE.2.4 |
| MCR02 | Use rational approximates to compare and estimate expressions with irrational numbers. | 8.NS.1.1, 8.NS.1.2 |
| MCR03 | Students will be able to work with radical and integer exponents and scientific notation. | 8.EE.1.1, 8.EE.1.4 |
| MCR04 | Understand the concept of a function and use them to model relationships between quantities, combining standard functions using arithmetic operations. | 8.EE.2.5, 8.F.2.4, S-ID.3.7, F-BF.1.1, F-IF.1.1 |
| MCR05 | Solve and graph equations and inequalities in one or two variables, and justify reasoning. | A-REI.1.1, A-REI.1.2, A-REI.2.3, A-REI.2.4, A-REI.4.10 |
| MCR06 | Solve systems of linear equations and inequalities, algebraically and graphically. | A-REI.3.5, A-REI.3.6, A-REI.4.11 |
| MCR07 | Use properties of rational exponents and apply properties of numbers to rational and irrational numbers. | N-RN.1.1, N-RN.1.2, N-RN.2.3, N-Q.1.1, N-Q.1.2, N-Q.1.3 |
| MCR08 | Summarize, represent and interpret data on two categorical and quantitative variables. | S-ID.2.5, S-ID.2.6 |
| MCR09 | Understand the relationship between zeros and factors of polynomials and use and prove polynomial identities to rewrite expressions. | A-APR.1.1, A-APR.2.3, A-APR.3.4 |
| MCR10 | Create equations that represent real-world mathematical relationships, including constraints and literal equations. | A-CED.1.1, A-CED.1.2,A-CED.1.3, A-CED.1.4 |
| MCR11 | Find patterns and structure in polynomial and rational expressions. | A-SSE.1.1, A-SSE.1.2,A-APR.4.6, A-APR.4.7 |
| MCR12 | Apply transformation rules to polynomial, exponential, and logarithmic functions. | A-SSE.2.3, F-BF.2.3, F-BF.1.1c |
| MCR13 | Interpret functions that arise in real-world context, including restricting domain/range, and interpreting average rate of change. | F-IF.2.4, F-IF.2.5, F-IF.2.6 |
| MCR14 | Graph and write equivalent forms of functions by hand and using technology, and compare functions in different representations. | F-IF.3.7, F-IF.3.8, REI.4.10 |
| MCR15 | Use coordinates to prove simple geometric theorems algebraically. | G-GPE.2.5, G-GPE.2.6, G-GPE.2.7 |