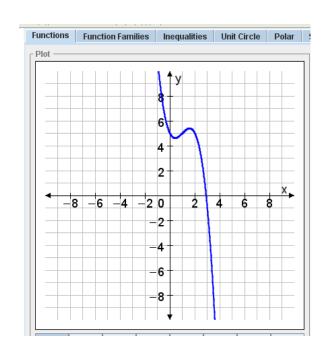
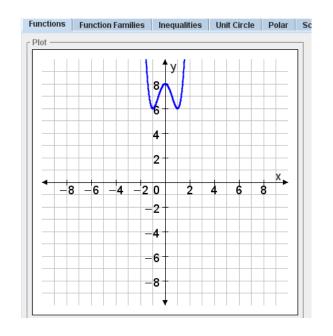
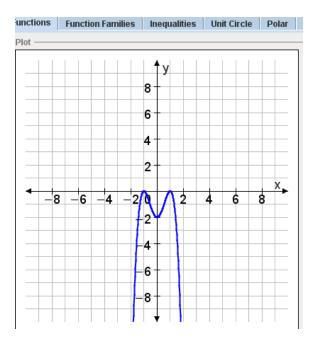
Math 3 Characteristics of Polynomial Functions







| Domain | |
|--------------|--|
| Range | |
| Zeros | |
| Y-Intercept | |
| Max and Min | |
| Increase and | |
| Decrease | |
| End Behavior | |
| | |

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|--------------|--|
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|-----------------------|--|
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| Zeros | |
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| End Behavior | |

Math Instructional Framework

| Full Name | |
|--|--|
| Time Frame | 6 weeks - Unit 5 |
| Unit Name | Polynomials |
| Learning Task/Topics/ Themes | Characteristics of Polynomial Functions |
| Standards and Elements | MM3A1 – Students will analyze graphs of polynomial functions of higher degree. d. Investigate and explain characteristics of polynomial functions, including domain and range, intercepts, zeros, relative and absolute extrema, intervals of increase and decrease, and end behavior. |
| Lesson Essential Questions | How do you investigate and explain characteristics of polynomial functions? |
| Activator | |
| Vocabulary | Polynomial Functions, Domain, Range, Intercepts, Zeros, Relative and Absolute Extrema, Intervals of Increase, Intervals of Decrease, End Behavior |
| Work Session | Power Point for Notes –How do I analyze a Polynomial Function? Student Independent Practice Worksheets – End Behavior Characteristics of Graphs Worksheet Characteristics Worksheet |
| Summarizing/Closing/Formative Assessment | |

Characteristicsyof the Function Parent Function: <u>Transformations</u>: -8 -6 -4 -2 0 -6 Domain & Range <u>Intercepts</u> **End Behavior Extrema** Intervals of Increase and Decrease Slope at given points <u>Vertex</u> Axis of Symmetry

| Characteristics of the Function | | | |
|------------------------------------|--|--|--|
| 8 | Transformations: x ————————————————————————————————— | | |
| Domain & Range | Intercepts | | |
| | | | |
| End Behavior | <u>Extrema</u> | | |
| Intervals of Increase and Decrease | Slope at given points | | |
| | | | |
| Vertex | Axis of Symmetry | | |

Characteristicsy of the Function Parent Function: (1.405, 4.649) <u>Transformations</u>: -8 -6 -4 -202 Domain & Range <u>Intercepts</u> **End Behavior** <u>Extrema</u> Intervals of Increase and Decrease Slope at given points <u>Vertex</u> Axis of Symmetry

Characteristicsyof the Function Parent Function: Transformations: X -8 -6 -4 -2 0 -2 (9.08 -4 -6 -8-Domain & Range Intercepts **End Behavior** <u>Extrema</u> Intervals of Increase and Decrease Slope at given points <u>Vertex</u> Axis of Symmetry