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| **LG #** | **A102** | **Standards:** | **A-APR.1.1, A-APR.2.3** |
| **4.0** | **In addition to Score 3.0, in-depth inferences and applications that goes beyond instruction to the standard.****The student will be able to:*** Propose a method as to how to find the zeros for problems that have the form

y=ax3 + bx2 + cx + d (including graphing, tables, algorithm and/or verbal description). **No major errors or omissions regarding the score 4.0 content.** |
| **3.5** | In addition to 3.0, in-depth inferences and applications with partial success. |
| **3.0** | **Students will be able to perform arithmetic operations on polynomials and find factors and zeros of polynomials****The student will be able to:*** Explain that the [sum](http://www.cpalms.org/Public/PreviewResource/Preview/63905), [difference](http://www.cpalms.org/Public/PreviewResource/Preview/63966), or [product](http://www.cpalms.org/Public/PreviewResource/Preview/63976) of two polynomials will always be a polynomial, which means that polynomials are closed under the operations of addition, subtraction, and multiplication. ([A-APR.1.1](http://www.cpalms.org/Public/PreviewResource/Preview/64026))
* [Use zeros to construct a graph of a second degree polynomial. (A-APR.2.3)](http://www.cpalms.org/Public/PreviewResource/Preview/68072)
* [Use zeros to construct a graph of a factored third degree polynomial. (A-APR.2.3)](http://www.cpalms.org/Public/PreviewResource/Preview/68204)
* [Identify zeros of third degree polynomials using factoring. (A-APR.2.3)](http://www.cpalms.org/Public/PreviewResource/Preview/68084)

**No major errors or omissions regarding the score 3.0 content (simple or complex).** |
| **2.5** | No major errors or omissions regarding 2.0 content and partial knowledge of 3.0 content. |
| **2.0** | **The student recognizes and describes specific terminology such as:**

|  |  |  |
| --- | --- | --- |
| * Closure
 | * Trinomial
 |  |
| * Zeros of a Function
 | * Polynomial
 |   |
| * Monomial
 | * Degree of a Polynomial
 |   |
| * Binomial
 | * Factor
 |   |

**The student will be able to:*** Add polynomials. (A-APR.1.1)
* Subtract polynomials. (A-APR.1.1)
* Multiply polynomials. (A-APR.1.1)
* Identify the greatest common factor of a polynomial. (A-APR.2.3)
* Identify zeros of second degree polynomials using factoring. (A-APR.2.3)
 |
| **1.5** | Partial knowledge of the score 2.0 content, but major errors or omissions regarding score 3.0 content. |
| **1.0** | With partial understanding of some of the simpler details and processes and some of the more complex ideas and processes. |
| **0.5** | With help, a partial understanding of some of the simpler details and processes and some of the more complex ideas and processes. |
| **0.0** | Even with help, no understanding or skill is demonstrated |