**CCHS Mathematics III**

**Credit 3A Assessment Study Guide**

Define the following Mathematical Terms

|  |  |  |  |
| --- | --- | --- | --- |
| Linear function | Graph y-y1=m(x-x1) | Graph 2x + 3y = 12 | Graph y=mx + b |
| Quadratic Function | Zeros, real roots, complex roots | y-intercept  x-intercept | End Behavior of a Function |
| Minimum, Minimum | vertex | Axis of symmetry | Quadratic Standard Form |
| Quadratic Vertex Form | Cubic Function | Exponential Function | Slope |
| Polynomial function | Increasing & Decreasing Behavior | Arithmetic Operations on functions | Graph y=x3 |

Understand the following Tasks

1. Identify the graph of a linear function.
2. Determine the graph of an exponential function.
3. Identify the graph of a quadratic function.
4. Determine the graph of a cubic function.
5. Determine the graph of a logarithmic function.
6. Identify what is a polynomial function.
7. Evaluate Logarithmic expressions.
8. Perform arithmetic operations (addition) on polynomial functions.
9. Perform arithmetic operations (subtraction) on polynomial functions.
10. Perform arithmetic operations (multiplication) on polynomial functions.
11. Perform arithmetic operations (division) on polynomial functions.
12. Describe the end behavior of a function.
13. Identify an increasing function.
14. Identify a decreasing function.
15. Identify the table of values for a linear function.
16. Identify the table of values for a quadratic function.
17. Identify the table of values for a cubic function.
18. Identify the table of values for a logarithmic function.
19. Identify the table of values for an exponential function.
20. Evaluate f(x) for a given value of x.
21. Find the roots of a quadratic function in factored form.
22. Find the roots of a quadratic function in standards from.
23. Given the leading coefficient and the roots write the factored form of a polynomial function.
24. Given the leading coefficient and the roots write the standard form of a polynomial function,