**CCHS Mathematics III**

**Credit 4A Assessment Study Guide**

Define the following Mathematical Terms

|  |  |  |  |
| --- | --- | --- | --- |
| Domain | Range | Increasing interval | Decreasing interval |
| Asymptotes | x-intercepts | Rational Expressions | Solutions |
| y-intercepts | Extraneous Solutions | Proper Rational Function | Degree of polynomial function |
| Roots | Domain | Multiply Rational Expressions | Odd function |
| Even Function | Long Division of Polynomials | Interval notation | End Behavior |

Understand the following Tasks

1. Identify the simplified form of a rational expression.
2. Determine if a value for x is the solution to a function.
3. Determine solutions to an inequaIity.
4. Determine the roots of a rational function.
5. Determine the extraneous solutions for a function
6. Identify true statements about a rational expressions.
7. Determine the degree of a polynomial.
8. Identify rational expression.
9. Find the solutions to a polynomial of a degree of 3dentify the graph of a quadratic function.
10. Write a function given the roots and domain having one extraneous root.
11. Graph a rational expression
12. Identify the graph of a rational expression.
13. Match rational expressions to graphs.
14. Identify the an odd function.
15. Identify an even function.
16. Identify an extraneous solution to a rational expression.
17. Identify a proper rational expression.
18. Simplify rational expressions
19. Perform long division on a rational expression.
20. Given a rational function find the domain, range, increasing interval, decrasing interval, x-intercepts, y-intercepts, asymptotes, end behavior.
21. Graph a rational expression and include the asymptotes as doted lines.