H Math 3 Final Exam Review

1. Solve 
2. What are the solutions of 
3. What is the vertex of the parabola whose equation is 
4. What is the radius of the circle with equation 
5. Given , find .
6. Find the value of z in the following system: 
7. What is the value of the discriminant for the equation 
8. What is the solution set of 
9. Find the inverse of 
10. Find 
11. Solve 
12. Find y when x = 14 if y varies inversely as x and y = 5 when x = 8.
13. Evaluate 
14. Solve 
15. Solve 
16. What is the 12th term of the arithmetic sequence with  and ?
17. Evaluate 
18. Divide 
19. If  find 
20. If y varies jointly as x and z and y = 36 when x = 2 and z = -4, find y when x = -6 and z = 3.
21. Solve 
22. Find the sum of the series 
23. Find all rational zeros of 
24. Simplify 
25. Factor 
26. Factor 
27. Divide using long division 
28. Describe the roots 
29. Solve by completing the square 
30. Write the equation of the graph of  that is translated 2 units left and 1 unit down
31. Find all horizontal and vertical asymptotes of 
32. Simplify 
33. Divide 
34. Find all roots of 
35. Find a polynomial of degree 3 with the following zeros: 5, 2i.
36. Solve 
37. Solve 
38. Simplify 
39. Factor 
40. Find the inverse of 
41. Solve 
42. Solve 
43. Solve 
44. Simplify 
45. Find the sum of 
46. Multiply 
47. Divide 
48. Given that  find 
49. Find the values of x and y, if 