

## Answer Key

### Math 1051 Fall 2001 Final Exam

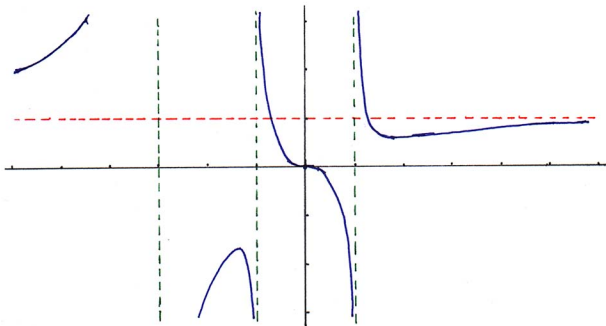
#### Multiple Choice Problems

1. C
2. A
3. B
4. A
5. B
6. (question missing)
7. B
8. B
9. C
10. A
11. C
12. C
13. B
14. B
15. C

#### Written Answer Problems

16. Quotient:  $x^2 + 3x + 5$ ; remainder:  $15x^2 + 5$
17. domain: all reals except  $x = -3, -1, 1$   
x-intercept, y-intercept:  $(0, 0)$   
horizontal asymptote:  $y = 1$   
vertical asymptotes:  $x = -3, x = -1, x = 1$   
see below for graph
18.  $x = 4$
19.  $(x - 2)^2 + (y + 5)^2 = 65$
20. see below for description and graph
21.  $x^{(1/5)} \cdot y^4$

graph for #17:



graph for #20:

