

RIDDLE
CALCULUS

NAME _____

SECTION 3-6 Practice - 25 Points

ANALYZE AND SKETCH THE GRAPH OF EACH FUNCTION LISTED BELOW. YOUR SUMMARY SHOULD INCLUDE THE FOLLOWING INFORMATION:

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|--|---------------------------------|
| 1. domain | 10. second derivative |
| 2. range | 11. critical numbers |
| 3. vertical asymptotes | 12. sign analysis |
| 4. horizontal asymptotes | 13. concave up / down intervals |
| 5. first derivative | 14. points of inflection |
| 6. critical numbers | 15. x-intercepts |
| 7. sign analysis | 16. y-intercepts |
| 8. increasing/decreasing interval | 17. the sketch of the graph |
| 9. maximum, minimum, saddle point values | |

Function: $f(x) = \frac{x^3 - 4}{x^2}$

