PreCalculus ‘14-15 Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_

Take-Home Midterm

Dr. Quattrin Score

CALCULATOR ALLOWED

Round to 3 decimal places. Show all work.

1. Find the equations of the lines tangent and normal to  at *x* = 2.

2. Find all zeros of  on your calculator.

3. Find an inequality that has this sign pattern and solution:



and 

4. Solve this inequality: .

5. The extreme points of  algebraically.

6. Find VAs, HA, POEs and zeros of 

Zeros:

VAs:

POEs:

EB:

7. Find extreme points of . Show the derivative and algebra supporting the points

8. Find all the zeros and domain of 

9. Find  if.10. List all the traits and sketch 

Domain: Range:

X-Intercepts: Y-Intercepts:

End Behavior: Extremes:



11. List all the traits and sketch 

Domain: Range:

X-Intercepts: Y-Intercepts:

VAs: POEs:

End Behavior: Extremes:



EC. List all the traits and sketch  on

Domain: Range:

X-Intercepts: Y-Intercepts:

VAs: POEs:

End Behavior: Extremes:

