

PreCalculus '13-14

Name: _____

Dr. Quattrin

Practice Sp Final-- CALCULATOR ALLOWED

Round to 3 decimal places.

Score _____

Show all work.

1. Find the zeros and Domain of $f(x) = \frac{1}{2}x^4 - 2x^3 - 9x^2 + 1$. Show the supporting algebraic work.

2. Find the critical values and extreme values of $f(x) = \frac{1}{2}x^4 - 2x^3 - 9x^2 + 1$. Show the derivative and algebra to support the critical values.

3. Find the traits and **sketch** $f(x) = \frac{1}{2}x^4 - 2x^3 - 9x^2 + 1$.

Domain:

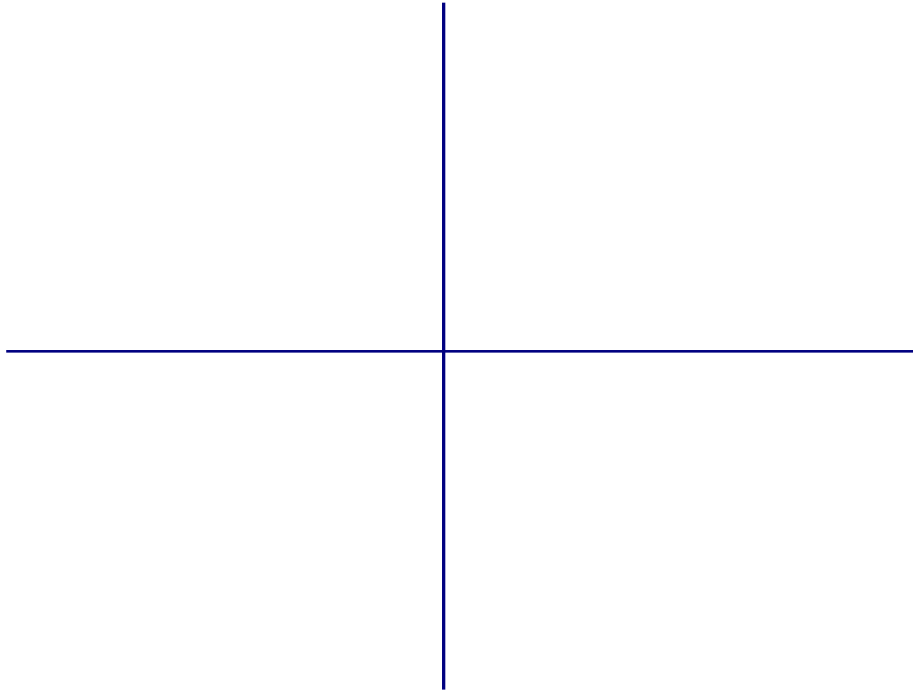
Range:

Y – Int:

End Behavior:

Zeros:

Extreme Points:



4. Find the zeros and Domain of $y = 9(x^2 - x)e^{2x}$. Show the supporting algebraic work.

5. Find the critical values and extreme values of $y = 9(x^2 - x)e^{2x}$. Show the derivative and algebra to support the critical values.

6. Find the traits and **sketch** $y = 9(x^2 - x)e^{2x}$.

Domain:

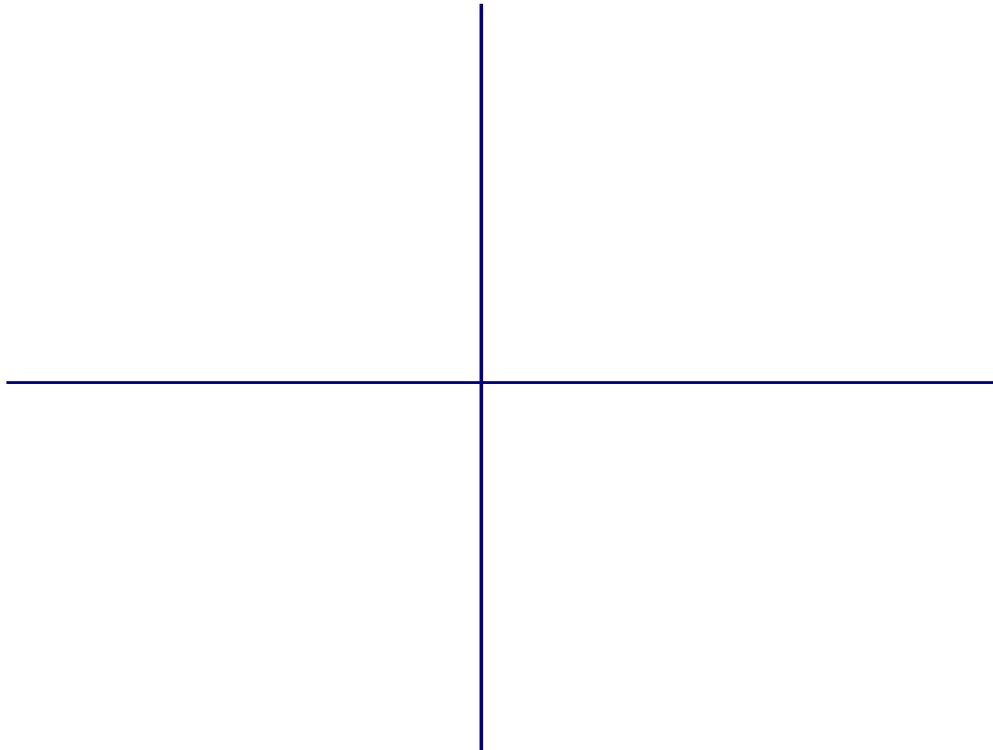
Range:

Y – Int:

End Behavior:

Zeros:

Extreme Points:



7. Find the zeros, VAs, and POEs of $y = \frac{-4x^2}{x^2 - 4}$. Show the supporting algebraic work.

8. Find the critical values and extreme values of $y = \frac{-4x^2}{x^2 - 4}$. Show the derivative and algebra to support the critical values.

9. Find the traits and **sketch** of $y = \frac{-4x^2}{x^2 - 4}$.

Domain:

Y – Int:

Zeros:

Range:

VAs:

End Behavior:

Extreme Points:

