

PreCalculus '13-14

Name: _____

Dr. Quattrin

Spring Final-- CALCULATOR ALLOWED

Round to 3 decimal places.

Score _____

Show all work.

1. Find the zeros and Domain of $y = 2x^3 + x^2 - 4x + 8$ on $x \in [0, 7]$. Show the supporting algebraic work.

2. Find the critical values and extreme values of $y = 2x^3 + x^2 - 4x + 8$ on $x \in [0, 7]$. Show the derivative and algebra to support the critical values.

3. Find the traits and **sketch** $y = 2x^3 + x^2 - 4x + 8$ on $x \in [0, 7]$.

Domain:

Range:

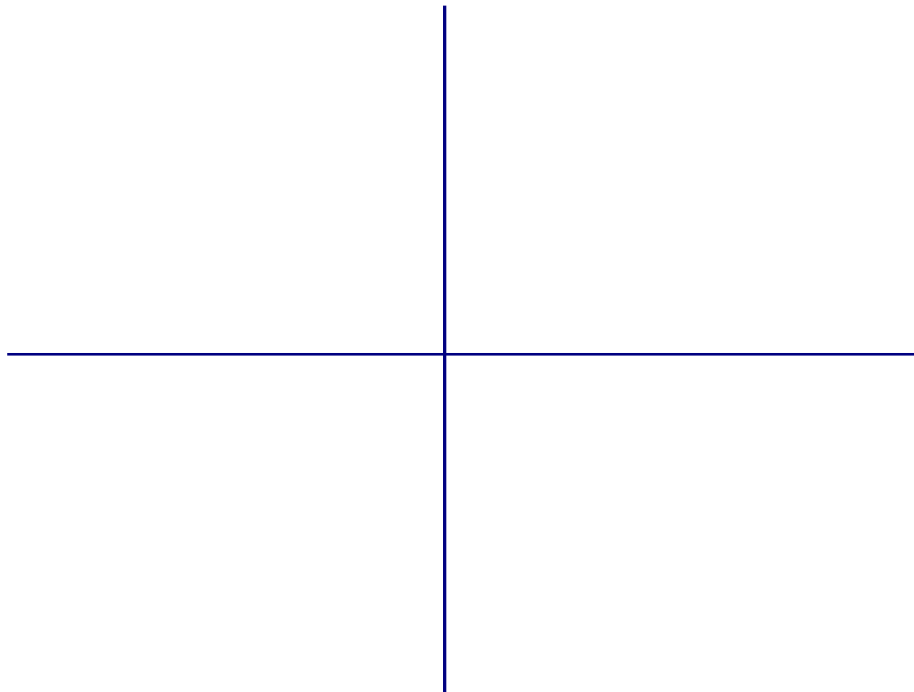
Y – Int:

EB Left:

Zeros:

EB Right:

Extreme Points:



4. Find the zeros and Domain of $y = (x^2 - 3x)e^{2x}$. Show the supporting algebraic work.

5. Find the critical values and extreme values of $y = (x^2 - 3x)e^{2x}$. Show the derivative and algebra to support the critical values.

6. Find the traits and **sketch** $y = (x^2 - 3x)e^{2x}$.

Domain:

Range:

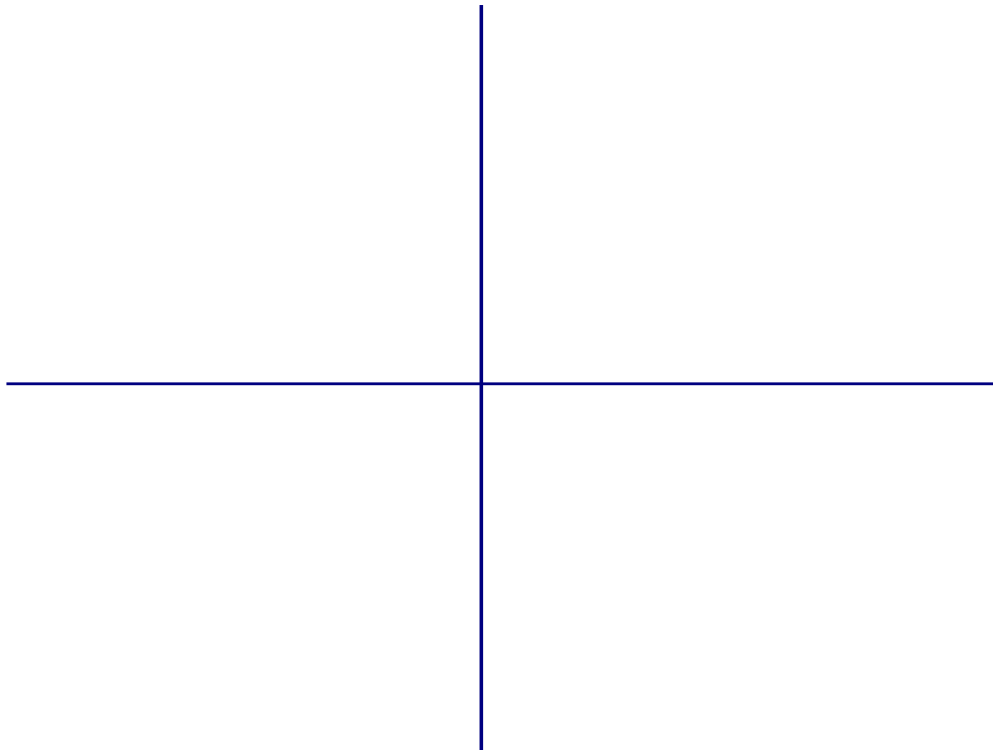
Y – Int:

EB Left:

Zeros:

EB Right:

Extreme Points:



7. Find the zeros, VAs, and POEs of $y = \frac{1-x^2}{x^2+4}$. Show the supporting algebraic work.

8. Find the critical values and extreme values of $y = \frac{1-x^2}{x^2+4}$. Show the derivative and algebra to support the critical values.

9. Find the traits and **sketch** of $y = \frac{1-x^2}{x^2+4}$.

Domain:

Y – Int:

Zeros:

Range:

VAs:

EB Left:

Extreme Points:

EB Right:

