

PreCalculus '13-14

Name: _____

Dr. Quattrin

Radical Practice Test-- CALCULATOR ALLOWED

Round to 3 decimal places.

Score _____

Show all work.

1. Find the zeros and Domain of $y = \sqrt{-3x^3 + 5x^2 + 48x - 80}$. Show the supporting algebraic work.

2. Find the critical values and extreme values of $y = \sqrt{-3x^3 + 5x^2 + 48x - 80}$. Show the derivative and algebra to support the critical values.

3. Find the critical values of $y = \sqrt{x^4 - 4x^2 + 32}$ on $x \in [-4, 4]$.

4. Find the zeros, VAs, and Domain of $y = \sqrt{\frac{-3x}{x^2 + 5}}$. Show the supporting algebraic work.

5. Find the critical values and extreme values of $y = \sqrt{\frac{-3x}{x^2 + 5}}$. Show the derivative and algebra to support the critical values.

PreCalculus '13-14

Name: _____

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Radical Practice Test—CALCULATOR NOT ALLOWED

Show all work.

Score _____

6a. $\frac{d}{dx}[(7x^2 - 2x)^{17}]$

6b. $\frac{d}{dx}[\sqrt[5]{5x^2 - 10x + 1}]$

7. Find the traits and **sketch** $y = \sqrt{-3x^3 + 5x^2 + 48x - 80}$.

Domain:

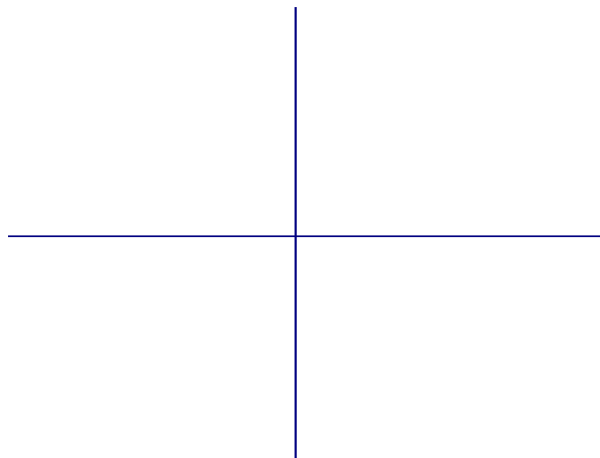
Range:

Y – Int:

End Behavior:

Zeros:

Extreme Points:



8. Find the traits and **sketch** of $y = \sqrt{\frac{-3x}{x^2 + 5}}$.

Domain:

Y-Int:

Zeros:

Range:

VAs:

End Behavior:

POEs:

Extreme Points:

