

Bellwork Alg 2A Tuesday, April 18, 2017

1. Use this equation: $y = -0.5x^4 + 3.5x^3 - 6x^2 - 2x + 9$

Find the coordinates of ALL extrema, if any. Round to the nearest hundredth.

Absolute Max:

Absolute Min:

Relative Max:

Relative Min:

2. Find ALL zeros of each by factoring.

a) $y = 3x^4 - 24x^3 + 48x^2$

b) $y = 2x^5 - 2x^3 - 12x$

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Answers

1. Use this equation: $y = -0.5x^4 + 3.5x^3 - 6x^2 - 2x + 9$

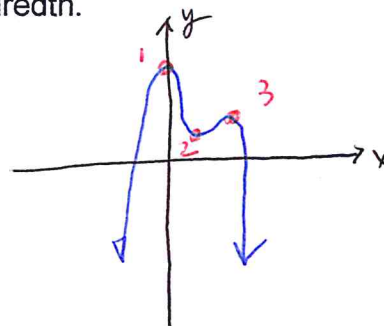
Find the coordinates of ALL extrema, if any. Round to the nearest hundredth.

1 Absolute Max: $(-0.15, 9.15)$

Absolute Min: NONE

3 Relative Max:
 $(3.40, 3.59)$

2 Relative Min:
 $(2.00, 1)$



2. Find ALL zeros of each by factoring.

a) $y = 3x^4 - 24x^3 + 48x^2$

b) $y = 2x^5 - 2x^3 - 12x$

$0 = 3x^2(x^2 - 8x + 16)$

$0 = 2x(x^4 - x^2 - 6)$

$0 = 3x^2(x-4)^2$

$0 = 2x(x^2 - 3)(x^2 + 2)$

$x = 0, 4$

$x = 0, \pm\sqrt{3}, \pm i\sqrt{2}$

$\begin{array}{r} -6 \\ -3 \times +2 \\ -1 \end{array}$

$\begin{array}{r} 16 \\ -4 \times -4 \\ -8 \end{array}$