WARM-UP

Use Newton's Method to approximate a real zero of $f(x) = 2x^3 + 2x - 11$. Use $x_1 = 2$ as an initial guess...

Compare dy and Δy for $y = 3x^3 + 4x - 5$ when $x = 2$ and $\Delta x = .02$ ...

A cube is measured to have sides of length 23 cm correct to within .5 cm. Use differentials to estimate the propagated and relative ~~area~~ error in the surface area of the cube...

Find the points on the hyperbola $y^2 - x^2 = 4$ that are closest to the point $(2, 0)$...

Warm-Up

1. 1.577
2. $\Delta y = .807$ and $dy = .8$
3. $Error_p = 138$ $Error_r = .0435$
4. $(1, \sqrt{5})$ and $(1, -\sqrt{5})$