AP Calculus AB   Mr. Shubleka   Quiz: 24

Present neatly on ~~separate paper~~. Justify for full credit. ~~No Calculators.~~

Name _____   Score _____   8 minutes

1.

A conical water tank with vertex down has a radius of
10 ft at the top and is 24 ft high. If water flows into the
tank at a rate of 20 ft^3/min, how fast is the depth of the
water increasing when the water is 16 ft deep?   (8 points)

2.

Use an appropriate local linear approximation to estimate
the value of $\cot 46°$, and compare your answer to the value
obtained with a calculating device.   (2 points)

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