Quiz 15

MATH 139-02
Tuesday, April 20, 2004

1. Find the average value of $f(x) = x^2 + 1$ on $[0, 2]$.

2. A particle had a velocity of $v(t) = \dfrac{t^4}{16}$ meters per second after t seconds had elapsed. What was the average speed of the particle during the first four seconds?

3. On the graph below, sketch a rectangle whose height is equal to the average value of the function graphed on the interval $[-2, 2]$. What is the geometrical significance of this rectangle? (That is, what does it have to do with the function graphed?)