QUIZ 9

Name _____

1. The density of cars (in cars per mile) down a twenty mile stretch of the Pennsylvania Turnpike is given by the formula $\delta(x) = 300(2 + \sin(4\sqrt{x + 0.15}))$. Find the total number of cars on this twenty mile stretch.

2. A rod with density $\delta(x) = 2 + \sin(x)$ lies on the x-axis with one end at the origin and the other end at $x = 3$. Find the moment and the center of mass of this rod.