Math 120 C, E   Quiz 5   December 2, 2004

Show all work for full credit.

1. (5 points) The concentration of a drug in a person's blood stream t minutes after injection is

$$C(t) = 3 + 0.5 \sin\left(\frac{\pi}{2}(t - 2.5)\right).$$

How much time during the first ten minutes after injection is the concentration above 3.2?

2. (5 points) The city of Mev had a population of 45,000 in 1980. The population doubles every 73 years. When will the population be 100,000?