Math 120 B and C - Autumn 2005
Mid-Term Exam Number Two
Answers November 17, 2005

Version A (first number in problem 1 is 43)

1. 619.313 ft
2. 143.0091 ft
3. 77.6 years
4. $\theta = 0.861162089$
5. $$g(t) = \begin{cases} 3t & \text{if } t < 0.5 \\ 3t+1 & \text{if } 0.5 \le t \le 1 \\ 3t & \text{if } 1 < t < 2 \\ 3t+1 & \text{if } 2 \le t \le 3 \\ 3t & \text{if } t > 3 \end{cases}$$

Version B (first number in problem 1 is 39)

1. 958.243 ft
2. 105.2718 ft
3. 90 years
4. $\theta = 1.06534391$
5. $$g(t) = \begin{cases} 3t & \text{if } t < 1.5 \\ 3t+1 & \text{if } 1.5 \le t \le 2 \\ 3t & \text{if } 2 < t < 5 \\ 3t+1 & \text{if } 5 \le t \le 6 \\ 3t & \text{if } t > 6 \end{cases}$$