## MATH 111 – EXAM II Answers Winter 2016

Version 1: In #1,  $TR(q) = -q^2 + 426q$ .

- 1. (a) (3 points) MR(100) = 225 dollars per Fleenet
  - (b) (5 points) 7794 dollars
  - (c) (3 points) from q = 0 to q = 213 Fleenets
  - (d) (5 points) q = 28.29 and 397.71 Fleenets
- 2. (a) (3 points) t = 75 minutes
  - (b) i. (4 points)  $\frac{R(t+3) R(t)}{3} = -0.02t + 1.97$ 
    - ii. (3 points) from t = 48.5 to t = 51.5
  - (c) i. (3 points) G(t) = 1.8t
    - ii. (4 points) t = 1.63 and 18.37 minutes
- 3. (a) (4 points)  $0.75x + 0.2y \le 600$  and  $0.05x + 0.1y \le 144$ 
  - (b) (2 points) P(x,y) = 0.9x + 2y
  - (c) (8 points) Vertices: (0,0), (0,1440), (800,0), (480,1200)
  - (d) (3 points) \$2880