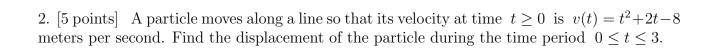# Quiz 6

Spring 2015   **Your name:**

Math 0220   **Your TA's name:**

No calculators, no notes, no books are permitted.

SHOW ALL WORK (no work = no credit). Write neatly. Simplify your answers.

---

1. [5 points]   Use the Midpoint Rule with $n = 3$ to approximate the integral $\displaystyle\int_{1/4}^{7/4} \frac{x}{x+1}\, dx$

2. [5 points]   A particle moves along a line so that its velocity at time $t \geq 0$ is $v(t) = t^2 + 2t - 8$ meters per second. Find the displacement of the particle during the time period $0 \leq t \leq 3$.

bonus problem [5 points extra]   In the previous problem find the total distance traveled during the time period $1 \leq t \leq 3$.