

## QUIZ 7

Your name \_\_\_\_\_

1. [8 pts] Find the length of the curve  $y = \frac{1}{3}(2x + 3)^{3/2}$ ,  $0 \leq x \leq 6$ .

**Problem 2 is on the back side.**

2. [12 pts] Find the centroid of the region  $0 \leq y \leq \sin x$ ,  $0 \leq x \leq \frac{1}{2}\pi$  (in other words, the center of mass of a plate of uniform density that occupies this region).