

# MA 262 Section 596/597 Quiz 1

June Weiland

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**Problem 1.** Write your name and section number at the top of a full sized sheet of paper.

**Problem 2.** Find a function  $y = f(x)$  satisfying the differential equation and initial condition

$$\frac{dy}{dx} = \frac{1}{\sqrt{x+5}}, \quad y(4) = -1.$$

**Problem 3.** Find the position and velocity of an object moving along a straight line with the given acceleration, initial velocity, and initial position

$$a(t) = -48, \quad v(0) = 60, \quad s(0) = 10.$$