

Physics 131, Summer 2010, Exam/Quiz 1. Chapter 1-4. Name \_\_\_\_\_

There are eight (8) questions. Please work them all. Your grade will be awarded on the basis of the seven (7) problems you work most successfully. Be sure to include magnitude, units, signs, and direction(s) (if appropriate) to get full credit for your answers! Use extra blank sheets (provided by the instructor) if you need them. Please box your answers.

Useful information:

$$g = 9.80 \text{ m/s}^2 \text{ downward}$$

$$1 \text{ meter} = 3.281 \text{ feet}$$

$$v_{\text{avg}} = \Delta x / \Delta t$$

$$a_{\text{avg}} = \Delta v / \Delta t$$

$$a_c = v^2 / r$$

$$F = ma$$

$$F_{\text{friction}} = \mu F_n = \mu F_{\text{normal}}$$

Equations of uniformly accelerated motion:  $v = v_o + at$        $v_{\text{avg}} = (v_o + v) / 2$

$$\Delta x = \frac{1}{2} (v_o + v) t \quad \Delta x = v_o t + \frac{1}{2} a t^2 \quad v^2 = v_o^2 + 2 a \Delta x$$