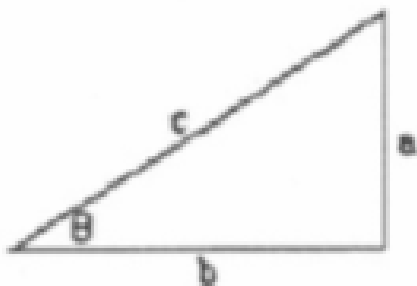


## Physics 160 Exam 1

### Instructions:

- Please do not write on the exams. They will be used for the next class.
- Blank paper will be on the center table for you to use for your calculations.
- Please fill in the scantron sheet provided. You should fill in your name and student ID number.



$$x = x_0 + v\Delta t$$

$$x = x_0 + v_0\Delta t + \frac{1}{2}a\Delta t^2$$

$$v = v_0 + a\Delta t$$

$$v^2 = v_0^2 + 2a\Delta x$$

$$g = 9.8 \text{ m/s}^2$$

$$1 \text{ km} = 0.621 \text{ mi}$$

$$1 \text{ d} = 24 \text{ h}$$

$$1 \text{ h} = 3600 \text{ s}$$

$$a^2 + b^2 = c^2$$

$$\sin \theta = \frac{a}{c}$$

$$\cos \theta = \frac{b}{c}$$

$$\tan \theta = \frac{a}{b}$$

$$\text{If } Ax^2 + Bx + C = 0 \text{ then } x = \frac{-B \pm \sqrt{B^2 - 4AC}}{2A}$$

$$C = 2\pi r$$

$$A = \pi r^2$$

$$V = \frac{4}{3}\pi r^3$$

$$V = L^3$$

$$V = 4\pi r^2 \Delta r$$