

## Physics 10 Placement Test Formula Sheet

**Note:** use  $9.81 \text{ m/s}^2$  for the acceleration due to gravity

$$v_{ave} = \frac{\Delta d}{\Delta t}$$

$$v = \frac{d}{t}$$

$$a = \frac{v_f - v_i}{t}$$

$$F_{net} = ma$$

$$W = F_{ave} d$$

$$d = v_i t + \frac{1}{2} a t^2$$

$$d = \left( \frac{v_i + v_f}{2} \right) t$$

$$E_k = \frac{1}{2} m v^2$$

$$E_p = mgh$$

$$\% \text{efficiency} = \frac{W_{out}}{W_{in}} \times 100\%$$

$$Q = mc\Delta T$$

$$\Delta H = \frac{Q}{n}$$