

**Worksheet # 1**

Monday, January 5, 2009

**Name**

**Question (5 pts):**

Consider a 1D harmonic wave moving with velocity  $v$  in the positive  $x$ -direction, described by the disturbance  $\psi(x, t) = A \sin[k(x-vt)]$ . Plot  $\psi(x, t)$  as a function of  $x$  at a fixed time  $t = 0$  (i.e. plot  $\psi(x, 0)$ ).