

??
 (6.628281,0.3125)m
 (3.1482813,0.3125)m
 (1.2673438,0.9525) k_0
 (8.547344,0.9525) k_0
 (4.847344,0.9525) ζ
 [linewidth=0.04cm,tbarsize=0.07055555cm
 5.0,ar-
 row-
 size=0.05291667cm
 2.0,arrowlength=1.4,arrowinset=0.4]]-
 >(3.18,-
 0.6825)(4.28,-
 0.7025)
 [linewidth=0.04cm,tbarsize=0.07055555cm
 5.0,ar-
 row-
 size=0.05291667cm
 2.0,arrowlength=1.4,arrowinset=0.4]]-
 >(6.6,-
 0.6825)(7.7,-
 0.7025)
 (3.7173438,-
 1.0875) x_1
 (7.177344,-
 1.0675) x_2

$$(1) \quad E = \frac{p_1^2}{2m} + \frac{p_2^2}{2m} + \frac{1}{2}k_0^2x_1^2 + \frac{1}{2}k_0x_2^2 + \frac{1}{2}(x_2 - x_1)^2 = \frac{p_1^2}{2m} + \frac{p_2^2}{2m} + \frac{1}{2}(k_0 + \zeta)x_1^2 + \frac{1}{2}(k_0 + \zeta)x_2^2 - \zeta x_1x_2$$

$$(2) \quad H = \frac{p_1^2}{2m} + \frac{p_2^2}{2m} + \frac{1}{2}kx_1^2 + \frac{1}{2}kx_2^2 + \eta x_1x_2$$

$k_{\text{amil-to-}}^{\text{uan}}$
 \overline{F}
 $F_2(x_i, P_i, t)$
 ?

$$(3) \quad F = F_2(x_i, P_i, t) = P_1 \frac{x_1 + x_2}{\sqrt{2}} + P_2 \frac{x_1 - x_2}{\sqrt{2}}$$

(X_i, P_i)

?
 $\dot{\mathbf{i}} =$

$F_2x_1 =$

$\frac{P_1+P_2}{\sqrt{2}}$

$p_2 \equiv$

$\frac{F_2x_1}{F_1-P_2} =$

$\frac{\sqrt{2}}{X_1} =$

$\frac{F_2P_1}{x_1+x_2} =$

$\frac{\sqrt{2}}{X_2} =$

$\frac{F_2P_2}{x_1-x_2} =$

$\frac{\sqrt{2}}{K} =$

$\frac{H}{F_2t} =$

$\frac{1}{P_1+P_2}$

$\frac{p_2}{P_1-P_2} \equiv$

$\frac{\sqrt{2}}{x_1} \equiv$

$\frac{x_1}{X_1+X_2}$

$\frac{\sqrt{2}}{x_2} \equiv$

$\frac{x_2}{X_1-X_2}$

$\frac{\sqrt{2}}{K} =$

$\frac{H}{P_{new}} =$

$\frac{P_1}{2m} +$

$\frac{P_2}{2m} +$

$\frac{1}{2}(k +$

$\eta)X_1^2 +$

$\frac{1}{2}(k -$

$\eta)X_2^2 =$

$j, P_k] =$

$i\hbar\delta_{jk}$

$\overline{\overline{}}$

$\overline{}_{j, X_k}$

$\overline{}_{j, P_k}$

$\overline{}_1 =$