$\frac{\mathrm{d}x}{\mathrm{d}t} = U + \frac{p}{k} \sqrt{\frac{g}{k}}$	$\frac{\mathrm{d}y}{\mathrm{d}t} = \frac{q}{k} \sqrt{\frac{g}{k}}$
	$dt = k \sqrt{k}$
$\frac{\mathrm{d}p}{\mathrm{d}t} = 0$	$\frac{\mathrm{d}q}{\mathrm{d}t} = 0$
$\frac{dt}{dt} = 0$	$\frac{d}{dt} = 0$