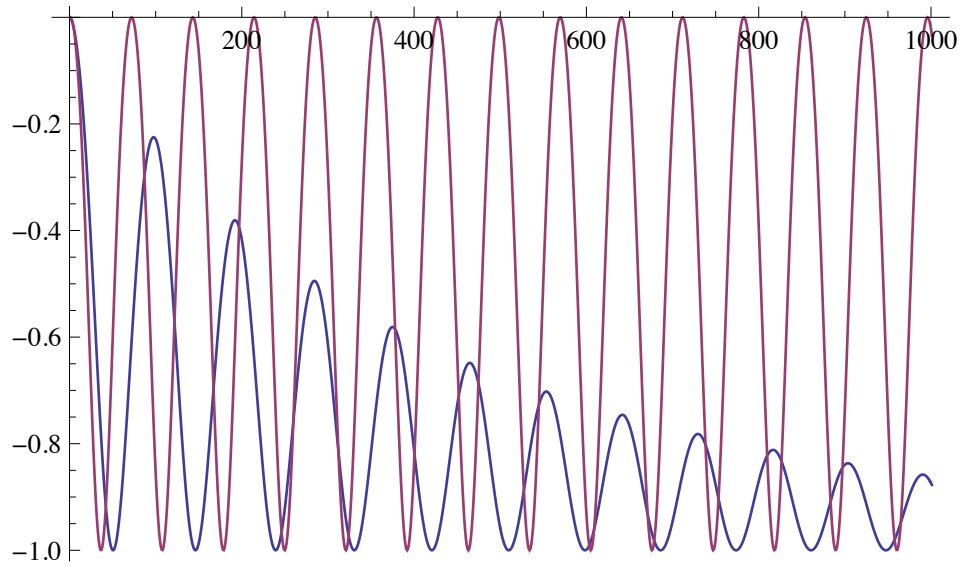
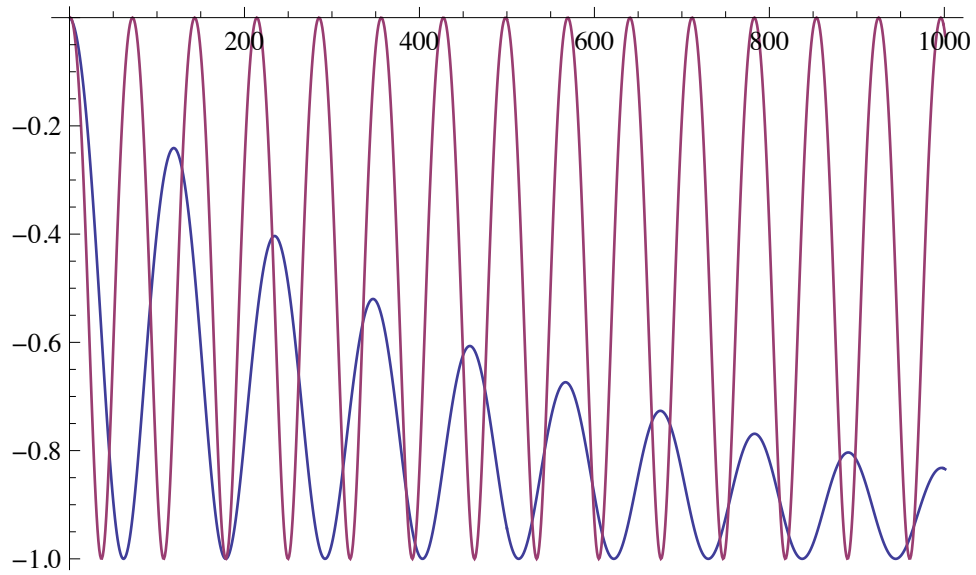


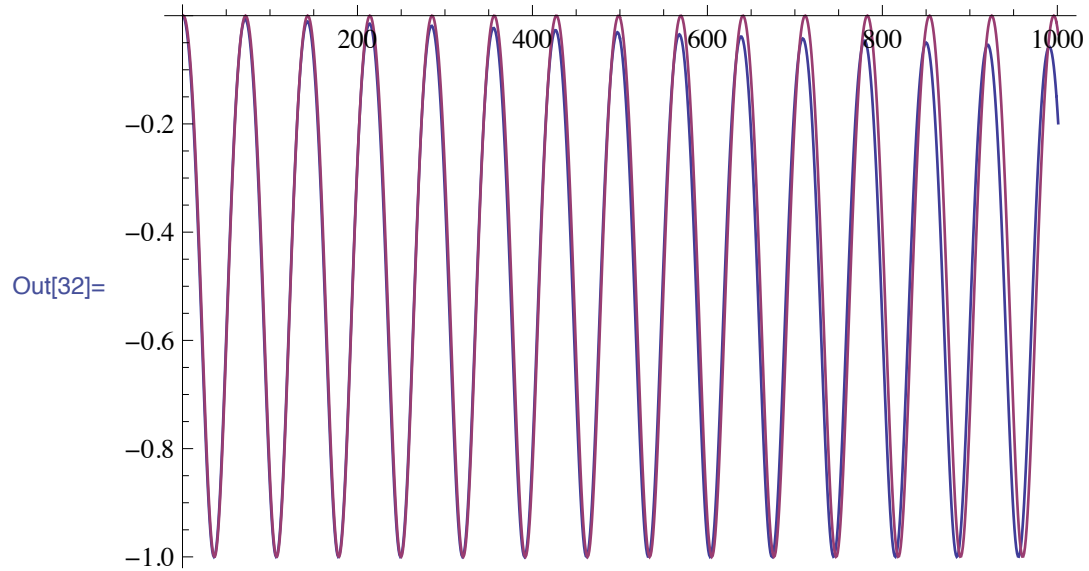
(* First difference velocity update $(x_2 - x_1) / dt$ *)



(* Central difference $(x_2 - x_0) / (2.0 * dt)$ *)



```
(* Second order difference (x2*k2 + x1*k1 + x0*k0)/dt  
k2=3/2, k1=-2,  
k0=1/2 *)
```



```
(* Lentine energy preservation *)
```

