Name $\qquad$
What your parents call you when they are cheesed off $\qquad$


Given this graph of position vs. time for a SHO, determine:

1. Period $=$

Amplitude $=$
2. Write an equation for its position:
3. Write an equation for its velocity: (EC - write one for its acceleration)
4. At 4.2 seconds what is its position, velocity and acceleration?
5. Fill in the table qualitatively: $(+$ or - or 0$)$

| Time | x | v | a |
| :--- | :--- | :--- | :--- |
| 3.0 s |  |  |  |
| 1.5 s |  |  |  |
| 2.4 s |  |  |  |
| 3.8 s |  |  |  |
| 4.5 s |  |  |  |
| 4.0 s |  |  |  |

