Name: $\qquad$ Date: $\qquad$ Class: $\qquad$

## "Gaitway" to Acceleration Summative Assessment

1. What is acceleration?
2. How can acceleration be calculated using position vs. time data?
3. How can position be calculated using acceleration vs. time data?
4. Solve the following problem:

The velocity of a moving person measured at different times is provided in the following table:

| time $t(\mathrm{~s})$ | 0.0 | 0.2 | 0.4 | 0.6 | 0.8 | 1.0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| velocity $v(\mathrm{~m} / \mathrm{s})$ | 0.0 | 0.6 | 1.0 | 0.0 | -0.2 | -0.8 |

A. Calculate an approximate value for the acceleration of the person at $t=0.6 \mathrm{~s}$.

Show your work and justify your methodology.
B. Calculate an approximate value for the change in position of the person during the time interval from $t=0.0 \mathrm{~s}$ to $t=1.0 \mathrm{~s}$. Show your work and justify your methodology.

