11. (9 points) Let $s(t)$ give the position of an object along a straight line at time t and let $v(t)$ denote its instantaneous velocity at time t.

(a) Give the definition of the *average velocity* of the object over the time interval from $t = a$ to $t = b$.

(b) Give the definition of the *average of the velocity function* over the interval from $t = a$ to $t = b$.

(c) Is the *average velocity* of the object over the time interval from $t = a$ to $t = b$ equal to the *average of the velocity function* over this time interval? If so, explain why. If not, explain why not.

Please rewrite your name and section number.

NAME: _____

SECTION NO: _____