ESP Quiz 4 (Kouba)
Please PRINT your name here : _____
This quiz is due next Tuesday at the beginning of ESP.

1.) (10 pts. each) Assume that you can run $s(t) = \sqrt{t}$ miles in t hours.

a.) What is your average velocity from $t = 1$ to $t = 4$ hours ?

b.) What is your instantaneous velocity when $t = 4$ hours ?

2.) (5 pts. each) Assume that $f(t)$ represents the surface area in square feet of a snowman at time t minutes.

a.) What are the units on the derivative $f'(t)$?

b.) What does $f'(t)$ mean in this context ?

3.) (10 pts. each) Use $f'(x) = \lim_{h \to 0} \dfrac{f(x+h) - f(x)}{h}$ to compute the derivative for

a.) $f(x) = 3x - x^2$

b.) $f(x) = \dfrac{x+5}{3-x}$