Motion Matching

Here's a little matching quiz. In the Function column are a list of properties of functions and in the Linear Motion column are a list of terms describing the motion of a particle. The two ideas have a lot in common. Put the letter of the items in the Linear Motion list opposite the corresponding item in the Function list (some linear motion items may be used more than once).

Function	**Linear Motion**
_____ 1 Value of a function at x	A. Acceleration
_____ 2 First Derivative	B. Particle "At rest"
_____ 3 Second derivative	C. Farthest left
_____ 4 Function is increasing	D. Farthest right
_____ 5 Function is decreasing	E. Moving left or down
_____ 6 Absolute maximum	F. Moving right or up
_____ 7 Absolute minimum	G. Particle changes direction
_____ 8 $y' = 0$	H. Position at time t
_____ 9 y' changes sign	I. Speed
_____ 10 Function increasing and concave up	J. Speed is increasing
_____ 11 Function is increasing and concave down	K. Speed is decreasing
_____ 12 Function is decreasing and concave up	L. Velocity
_____ 13 Function is decreasing and concave down	