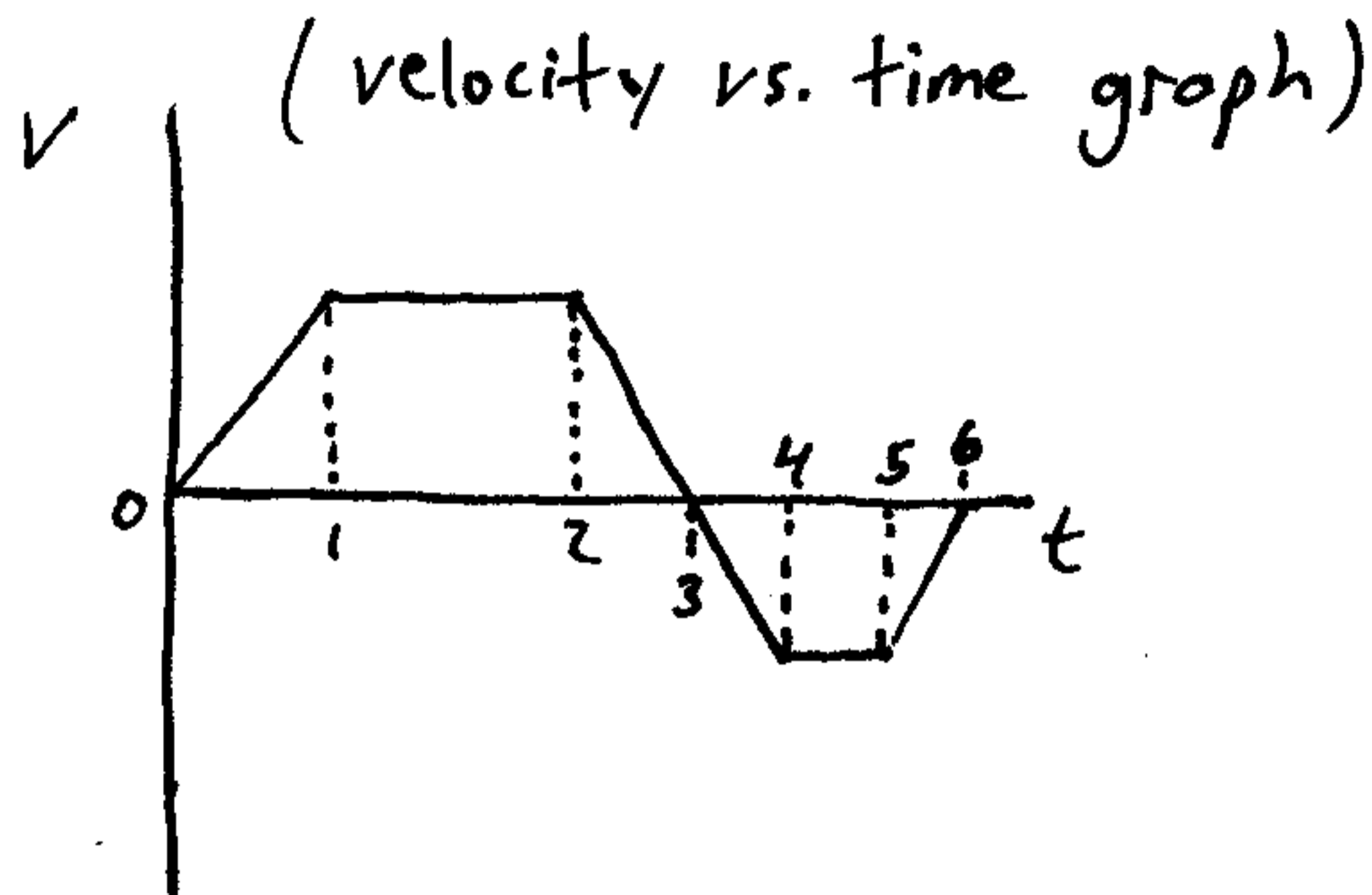


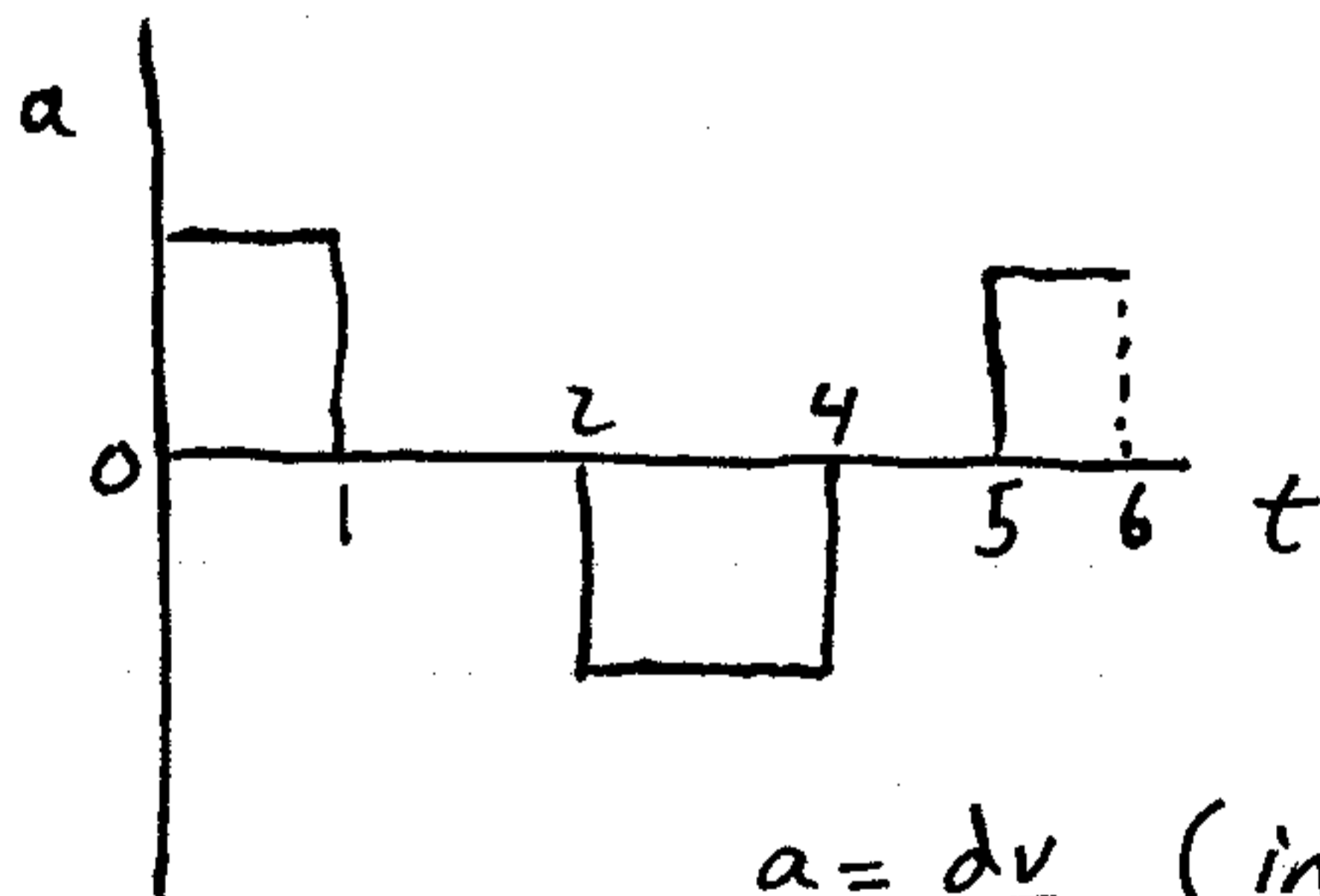
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This is a 1-D problem involving instantaneous acceleration.



A particle moves in a straight line, as represented by the above graph. Sketch a graph representing the acceleration of the particle.

Solution:



$$a = \frac{dv}{dt} \quad (\text{instantaneous acceleration} \\ = \text{instantaneous slope at time, } t, \text{ of } v)$$

Look at the slope of $v-t$ graph to see what acceleration, a , is doing.