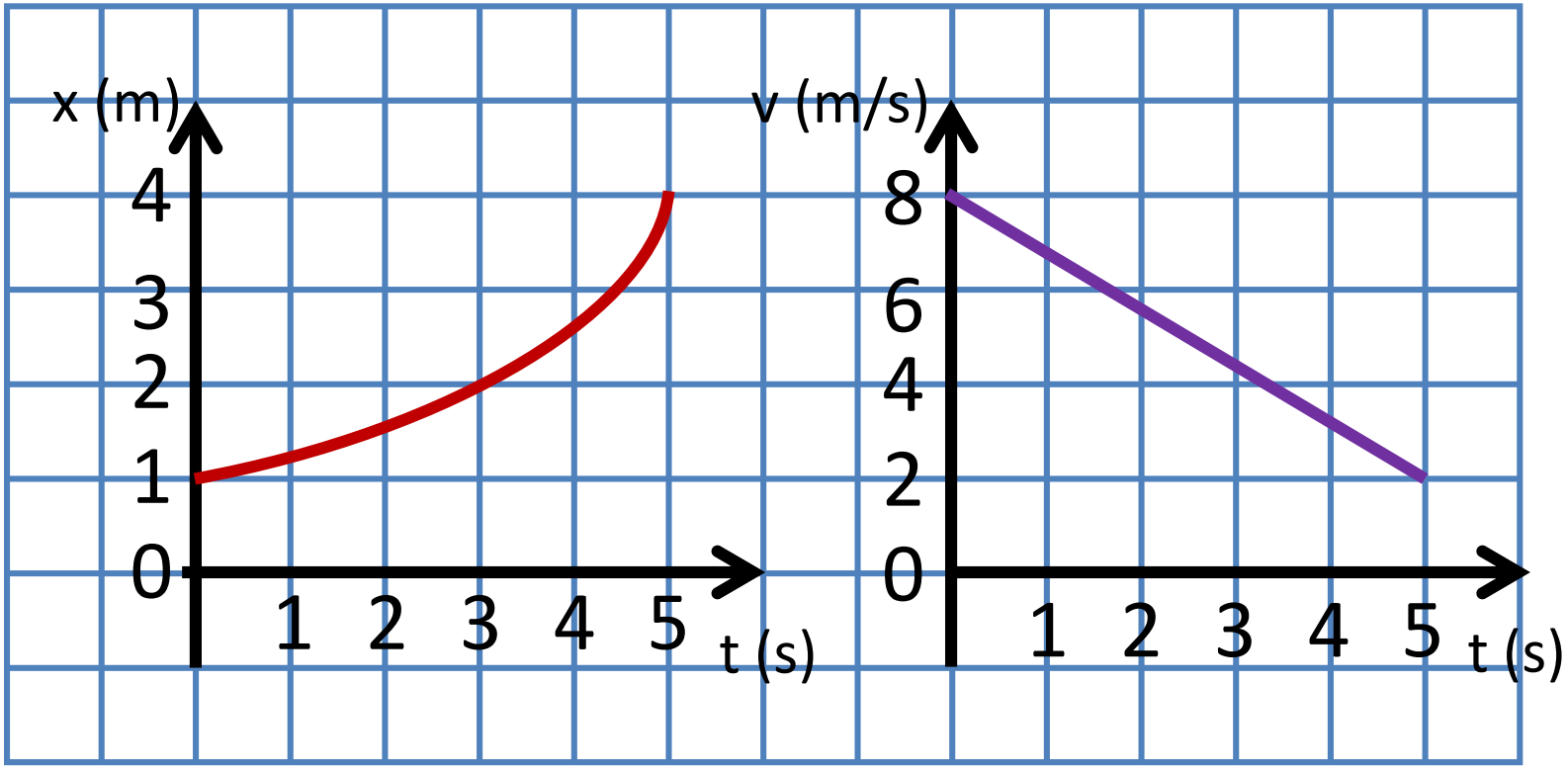
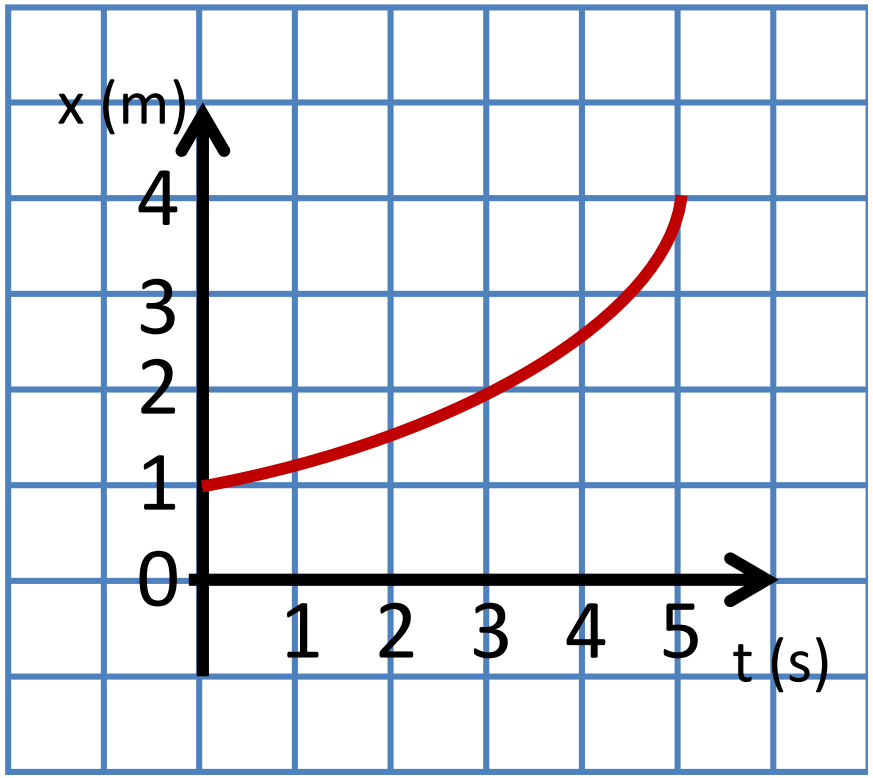
Evaluating Graphs (not Sketches)



Can we find numeric values to kinematic quantities?

Δx, Δt, v_{ave}, v_0, v_f, a

x-t graphs

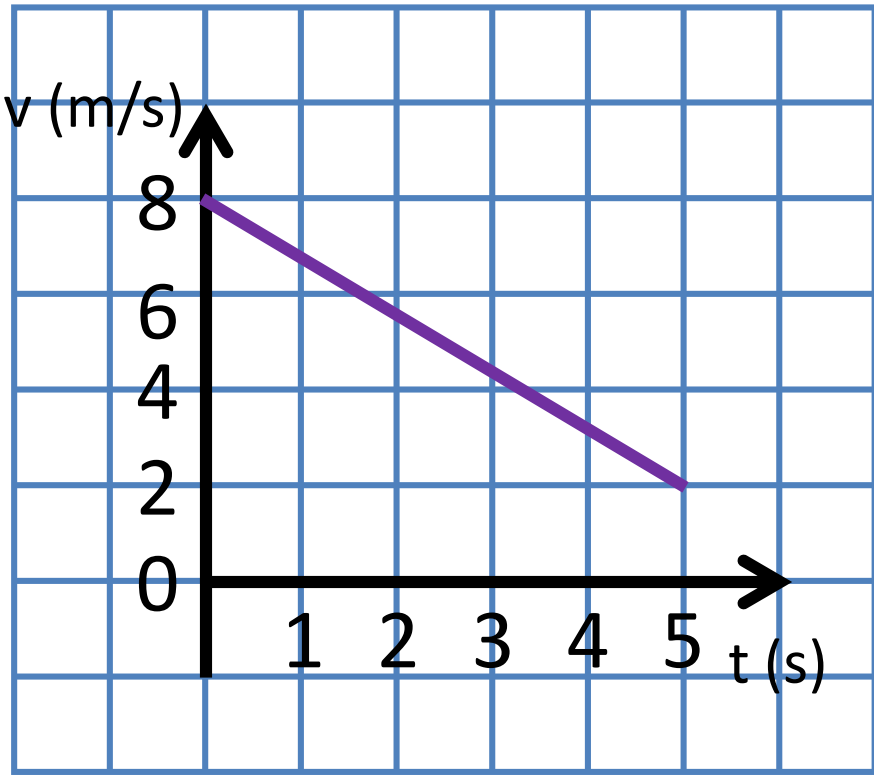


- Δx ☑ $\Delta x = x_f - x_0$
- Δt ☑ $\Delta t = t_f - t_0$
- v_{ave} ☑ $v_{ave} = \Delta x / \Delta t$
- v_0, v_f ☐

  yes but need to draw a tangent line to get slope
- a ☒

  but can tell sign

v-t graphs



- v_0, v_f ☑ read scale
- Δt ☑ $\Delta t = t_f - t_0$
- Δx ☑

  area under curve or

  $\Delta x = v_{ave} \times \Delta t$
- v_{ave} ☑

  $v_{ave} = \Delta x / \Delta t$, midpoint,

  or $v_{ave} = \frac{1}{2}(v_f + v_0)$
- a ☑ slope