LAB.

① create scale:

cm/s → cm → velocity vector.

$T = 20.0\ ms$

$\Delta t = 100ms$ → convert to s

② $\vec{\Delta v} = \vec{v_2} - \vec{v_1}$, $\vec{a} = \frac{\vec{\Delta v}}{\Delta t}$

③ cm/s^2 → cm ← acceleration vector

$\vec{a} = \frac{\Delta v}{\Delta t}\ cm/s^2$

$\vec{v} = \frac{\vec{\Delta d}(cm)}{\Delta t(s)}$

$= cm/s$

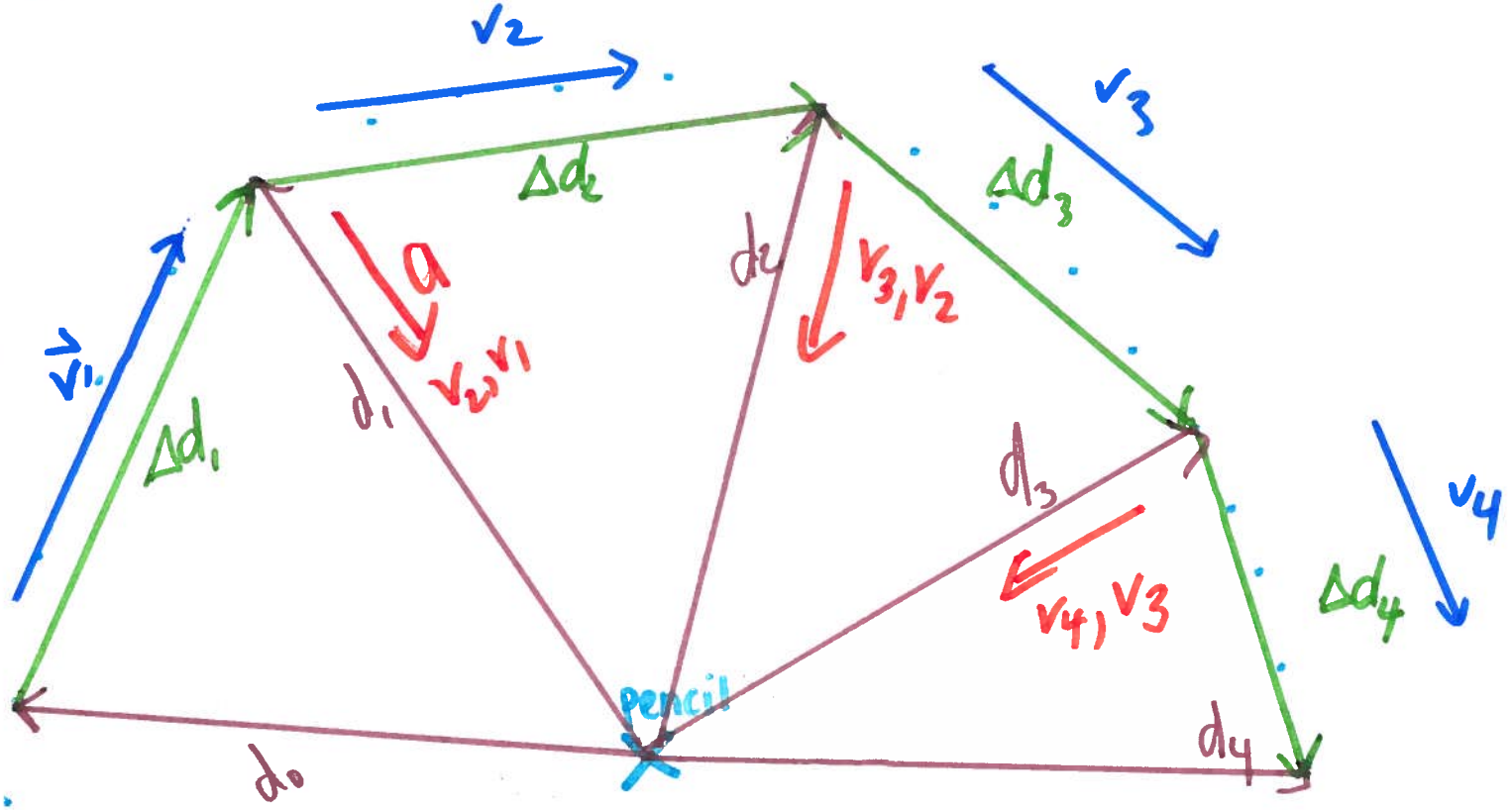

Chart.

	Real Δd_i (cm)	Real V_i (cm/s)	Drawn $\vec{V}_{scale}$	Drawn ΔV_{scale}	Real ΔV_i (a
d_0					
d_1					
d_2					
d_3					

Chart	Real ΔV_i (cm/s)	Real $\vec{a}_i$ (cm/s)	Drawn. $\vec{a}$ scale

END: Compare measured $\vec{a}$ to

$a_c = \frac{v^2}{r}$ (theoretical)