1. Complete the following diagram to the right that relates position-time ( $\vec{d}-f$ ), velocity-time ( $\vec{V}-f)$, and acceleration-time ( $\mathbf{a}-\boldsymbol{r}$ ) graphs.
2. For each of the following $d-t$ graphs:
(a) sketch the corresponding v-t and a-t graphs (solid lines).
(b) sketch the corresponding v-t and a-t graphs (dotted lines).
(c) is there a difference between (a) and (b)?
3. Indicate on your diagrams those graphs that represent (i) uniform motion and (ii) non-uniform motion.

