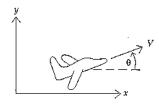
## Time-Series for a Glider

Below is a direction field modeling the flight of a glider airplane and two flight trajectories. v(t) denotes the (forward) velocity of the glider,  $\theta(t)$  is the angle between the nose of the plane and the horizontal. The model does not take into account the drag force a glider experiences; this means in particular that the glider in the model will stay in the air forever.



Draw the time series (i.e. the graph of the solutions in the  $\theta$ -t-plane and in the v-t-plane) for both flights. Then describe both flights in plain English.

