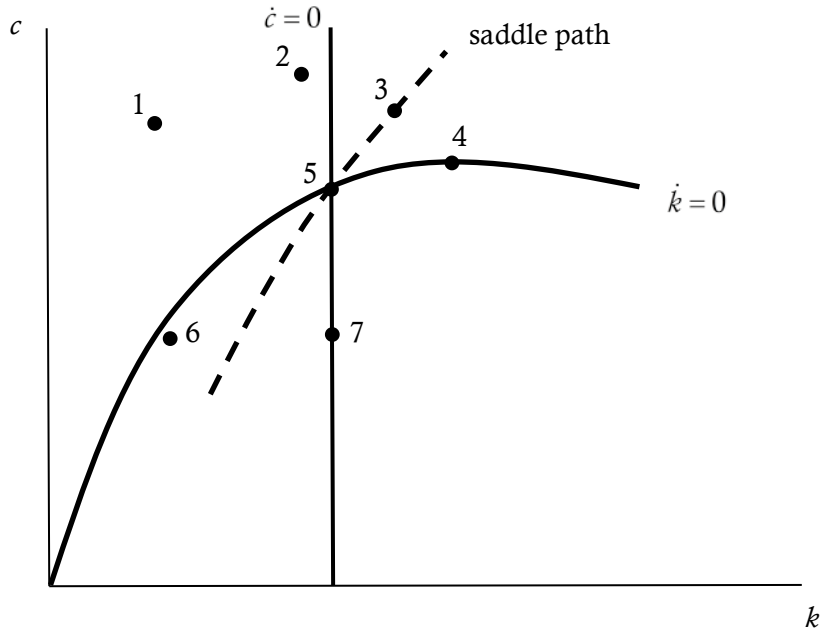
Economics 314 Spring 2014
Daily Question #8 February 13

In the Solow growth model, we were able to reduce the model's equations of motion to a single variable k. This allowed us to graph $\dot{k}$ on the vertical axis against k on the horizontal, depicting convergence to the steady state by Romer's Figure 1.3. In the Ramsey model, we have two variables, c and k, and cannot reduce them to one. To replicate Figure 1.3, we would need four dimensions, for c, k, $\dot{c}$, and $\dot{k}$. We cannot graph in four dimensions, so we use our available two dimensions for c and k and use arrows or +/– signs to indicate whether c and k are increasing or decreasing at that point. For each of the 7 numbered points in the phase diagram below, fill in the table to tell what will happen to c and k in the following short interval of time if the economy is currently at that point.



Point	Movement of c					Movement of k				
	Fall	Fall slowly	Stable	Rise slowly	Rise	Fall	Fall slowly	Stable	Rise slowly	Rise
1										
2										
3										
4										
5										
6										
7										