For the development of the New Keynesian *IS/LM* model we use a utility function such as:

$$U = \sum_{t=0}^{\infty} \beta^{t} \left[U(C_{t}) + \Gamma\left(\frac{M_{t}}{P_{t}}\right) - V(L_{t}) \right].$$

- 1. What role is played by β ? How have we represented the functionally equivalent terms in earlier models? What would be a typical value for β if the unit of time is a year?
- 2. Imposing an additive form on the utility function means that the partial derivatives of utility with respect to one argument (C, M/P, or L) do not depend on the other arguments. Why would this be useful in solving the model?
- 3. What signs would you expect for each of the following and why?
 - a. U' and U''
 - b. Γ' and Γ''
 - c. V' and V'' (don't forget the minus sign in front of this term)