

## Economic Growth and Fluctuations

### *Additional Homework Problems*

ECON 3133

Dr. Keen

1. Suppose the demand for carrots is  $D = 5 - 2P + E$ , where  $D$  is the quantity demanded,  $P$  is the price, and  $E$  is a shock to the people's demand for carrots. Suppose that the supply of carrots is fixed:  $S = 4$ , where  $S$  is the quantity supplied.
  - a. Assume that  $E = 0$ . Set  $D = S$  and find the price,  $P$ , and the output,  $D = S$ , of carrots.
  - b. Now suppose that the demand for carrots shifts up (a shock rises  $E$  from 0 to 1). Find the new price and output.
  - c. Again, suppose that  $E$  rises from 0 to 1, but now suppose the price of carrots is sticky and remains at the value in part a. By how much does the quantity demanded increase? Suppose that output equals the quantity demanded and compare your answer with part b.
2. Is it reasonable to ignore departures from potential GDP in the study of the change in real GDP over periods of 10 years or more? Why or why not?
3. The notion that departures from potential GDP are important is a necessary, but not sufficient, condition to warrant active use of government policy to offset recessions. Why is some belief in the importance of departures from potential GDP essential to rationalize activist policy to fight recessions? Why is it not sufficient to make activism superior to nonintervention?