QN 2 (Revealed preference: 30 marks)

(a) (4 marks) Define what it means for bundle A to be revealed preferred to bundle B.

I am given the following table of information about the consumption of donuts and eggs:

	period 1 (A)		period 2 (B)	
	price	quantity	price	quantity
donuts	1	100	1.25	120
eggs	p_{e1}	100	p_{e2}	80

(b) (6 marks) Show that, as long as $p_{e1} > 1$, then the bundle in period 1 (bundle A) is revealed preferred to the bundle in period 2 (bundle B).

(c) (6 marks) For what range of prices of p_{e2} is B revealed preferred to A?

(d) (6 marks) For what range of prices of both p_{e1} and p_{e2} are preferences inconsistent with consumer optimization? Explain briefly and intuitively.

(e) (8 marks) Suppose (nominal) incomes are £190 in both periods. What are the prices? Draw choices and budget sets on a graph. Are the choices consistent with consumer optimization? Is either bundle revealed preferred to the other bundle?