Economics 51 Summer 1999 TA: Joanna Campbell jhcampbl@leland

Solution Set: Quiz 4

Notation:

Assign the following coordinates to the points on the diagram: $C = (c_1, c_2)$ and $E = (e_1, 0)$

- a. In the labor-leisure-consumption framework, the following interpretation can be given to the diagram.
 - 1. The x_1 axis measure leisure
 - 2. The x_2 axis measure consumption
 - 3. E represents our maximum available time and the fact that there is no non-labor income.
 - 4. C indicates the actual labor/leisure consumption decision. c_1 indicates the amount of leisure enjoyed. $e_1 c_1$ indicates the amount of labor supplied at wage rate w, the slope of line CE. c_2 is the consumption level attained by working $e_1 c_1$, at wage rate w. In other words, $c_2 = (e_1 c_1) * w$.
 - 5. The depicted price change shows a fall in the wage rate. A given amount of labor supplied (measured along the horizontal axis to the left of E) results in a smaller attainable consumption bundle.
- b. In the current vs. next period consumption framework:
 - 1. The x_1 axis measures this period's consumption.
 - 2. The x_2 axis measures next period's consumption.
 - 3. E indicates income across periods. In the first period this individual receives poitive income e_1 while his/her second period income is zero.
 - 4. C indicates the consumption pattern that occurs if you consume amount c_1 in period one and save $e_1 c_1$ at interest rate r. Second period consumption $c_2 = (e_1 c_1) * (1 + r)$.
 - 5. The depicted price change shows a decline in the interest rate r.

c.

