

- (5) If we use a fixed-weight procedure and year 2 as the base year, then real GDP in year 3 (RGDP<sub>3/2</sub>) is equal to:
- (a) 1650
  - (b) 2300
  - (c) 2940
  - (d) 1960
- (6) If we use a fixed-weight procedure and year 3 as the base year, then real GDP in year 2 (RGDP<sub>2/3</sub>) is equal to:
- (a) 2520
  - (b) 1960
  - (c) 1903
  - (d) 1650
- (7) If we use a fixed-weight procedure and year 3 as the base year, then real GDP in year 3 (RGDP<sub>3/3</sub>) is equal to:
- (a) 1650
  - (b) 1994
  - (c) 2300
  - (d) 3450
- (8) Using the chain-weighted method, the inter-annual growth rate of RGDP between year 1 and year 2 is equal to:
- (a) 15%
  - (b) -11.73%
  - (c) -9.09%
  - (d) -14.29%
- (9) Using the chain-weighted method, the inter-annual growth rate of RGDP between year 2 and year 3 is equal to:
- (a) 25%
  - (b) 20%
  - (c) 36.90%
  - (d) None of the above
- (10) Using the chain-weighted method, the annual value of RGDP of year 1 in chained dollars of year 2 is equal to:
- (a) 1903
  - (b) 1680
  - (c) 2300
  - (d) None of the above

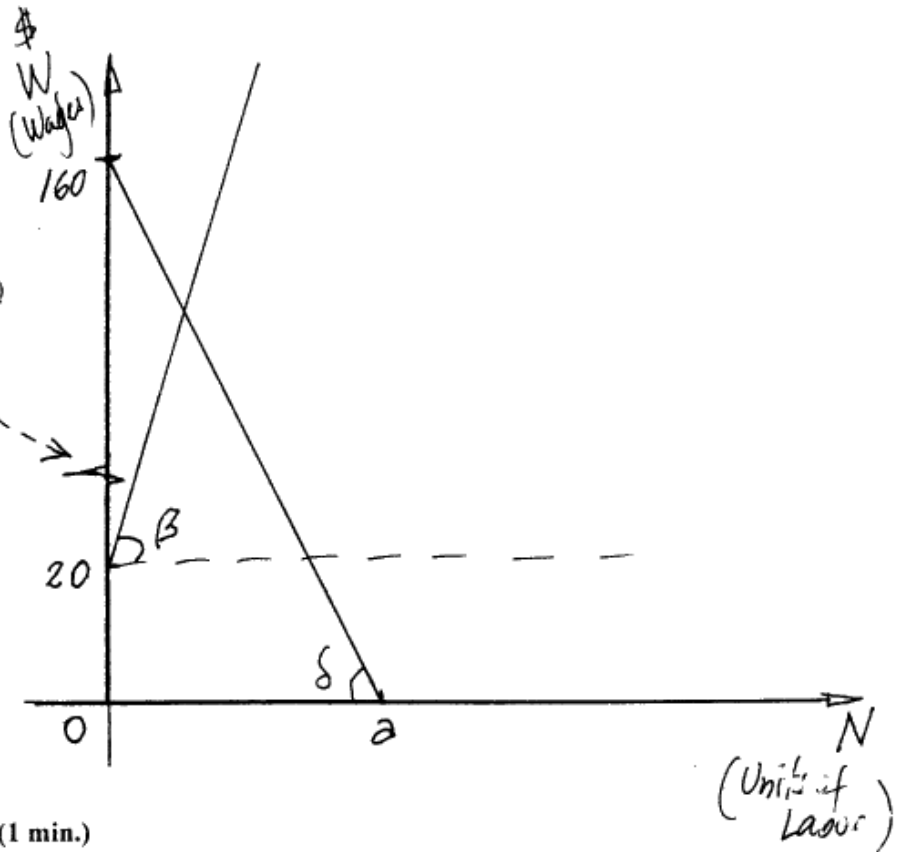
**END**

## II. EXERCISE (25 min.)

Given the following information about the Labor market in The Wet Republic of Rainland,

In absolute values:  
 $\tan(\delta) = 2$   
 $\tan(\beta) = (1.1) \tan(\delta)$

(The graph is not drawn at scale)



- What is the value of  $a$ ? (1 min.)
- Determine the particular equations of the demand for labor and the supply of labor (5 min.)
- Determine the equilibrium level of employment ( $N^e$ ) and the equilibrium wage ( $W^e$ ) (3 min.)
- What would happen to both  $N^e$  and  $W^e$  if the entrepreneurs forecast a recession in the near future in Rainland? Provide a formal mathematical statement and a graphical explanation to support your answer (3 min.)
- What would happen if the government of Rainland sets a minimum wage of \$ 100? Provide intuitive, numerical, and graphical explanations (6 min.)
- Assume that the government erroneously has set a "minimum wage" below the equilibrium wage,  $W^e$ , and this fixed wage level causes a difference between the demand for labor and the supply of labor. If such a difference is equal to 10 units of labor, how much was the value of the incorrect minimum wage? (4 min). Why do we say that this is an incorrect "minimum wage"? (3 points)