

Unit 9 Supplement

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Supplement for Slide 15

Question: unemployment rate $U = 0.05$, assume the employment rate $E = 0.3$, and normalize the working age population as 1, what is the amount of labor force?

Solution:

The employment rate $E = 0.3 \times \frac{\text{employed population}}{1}$, so the employed population is 0.3.

The unemployed population = labor force – employment population = $L - 0.3$

So the unemployment rate $U = \frac{\text{unemployed population}}{\text{labor force}} \Rightarrow 0.05 = \frac{L-0.3}{L} \Rightarrow 0.05L = L - 0.3 \Rightarrow 0.95L = 0.3 \Rightarrow L = 0.316$.