

# Unit 9 Supplement

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January 19, 2023

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## Supplement for Slide 15

**Question:** unemployment rate  $U = 0.05$ , assume the employment rate  $E = 0.8$ , and normalize the working age population as 1, what is the amount of labor force?

**Solution:**

The employment rate  $E = 0.8 = \frac{\text{employed population}}{1}$ , so the employed population is 0.8.

The unemployed population = labor force – employment population =  $L - 0.8$

So the unemployment rate  $U = \frac{\text{unemployed population}}{\text{labor force}} \Rightarrow 0.05 = \frac{L-0.8}{L} \Rightarrow 0.05L = L - 0.8 \Rightarrow 0.95L = 0.8 \Rightarrow L = 0.842$ .