

Problem 1. The supply of labor is the same thing as

- (a) the total number of jobs available in the economy
- (b) the labor force
- (c) the number of vacant jobs in the economy
- (d) the nubmer of jobs firms offer to households
- (e) none of the above

Problem 2. At the macroeconomic level, demand for labor is

- (a) the total number of filled and unfilled jobs available
- (b) the total number of unfilled jobs available
- (c) the total number of people who have jobs
- (d) the total number of people who demand jobs from business firms
- (e) none of the above

Problem 3. In the labor market, the **substitution effect** refers to the notion that when the real wage increases,

- (a) the opportunity cost of labor increases and, therefore, workers work less
- (b) the opportunity cost of leisure increases and, therefore, workers work more
- (c) workers feel they are richer and, therefore, they consume more and save less
- (d) workers feel they are richer and, therefore, they save more and consume less
- (e) none of the above

Problem 4. In the labor market, the **income effect** indicates that

- (a) when real wage increases, workers' income increases and therefore they save more
- (b) when real wage increases, workers need to work fewer hours to earn the same income as before
- (c) when real wage increases, workers need to work fewer hours to earn the same income as before, so they work less
- (d) when real wage increases, workers' income increases, and therefore they increase their demand for goods and services
- (e) none of the above

Problem 5. Which of the following is correct?

- (a) supply of labor = labor force participation rate \times labor force
- (b) supply of labor = labor force participation rate \times employment
- (c) supply of labor = labor force participation rate \times (employed + unemployed)
- (d) supply of labor = labor force participation rate \times population
- (e) none of the above

Problem 6. Consider the table below. Suppose that the price level is $P = \$30$. What is the nominal wage?

Real Wage	Labor Demand	Labor Supply
6	700	300
8	600	400
10	500	500
12	400	600
14	300	700

Problem 7. If the nominal wage rate is $W = 5,000$ per worker and the price of the output is $P = 100$ per unit, the firm will want to employ _____ workers (using the marginal productivity rule discussed in the class). With this many workers, it will be able to produce _____ tons of output.

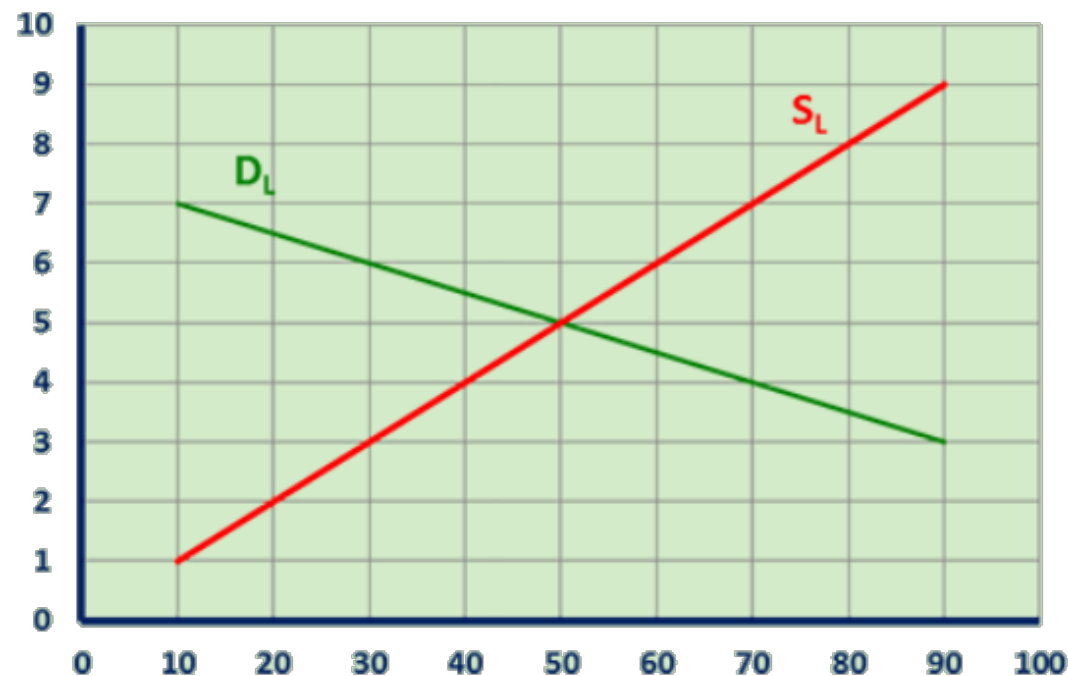
If the wage rate increases to $W = 6,000$ and the price level increases to $P = 150$, the firm will want to hire _____ workers in which case it will produce _____ tons of output.

Total Number of Workers Hired (Persons)	Total Amount of Output Produced (Tons)
0	0
1	80
2	150
3	210
4	260
5	300
6	330
7	350
8	360

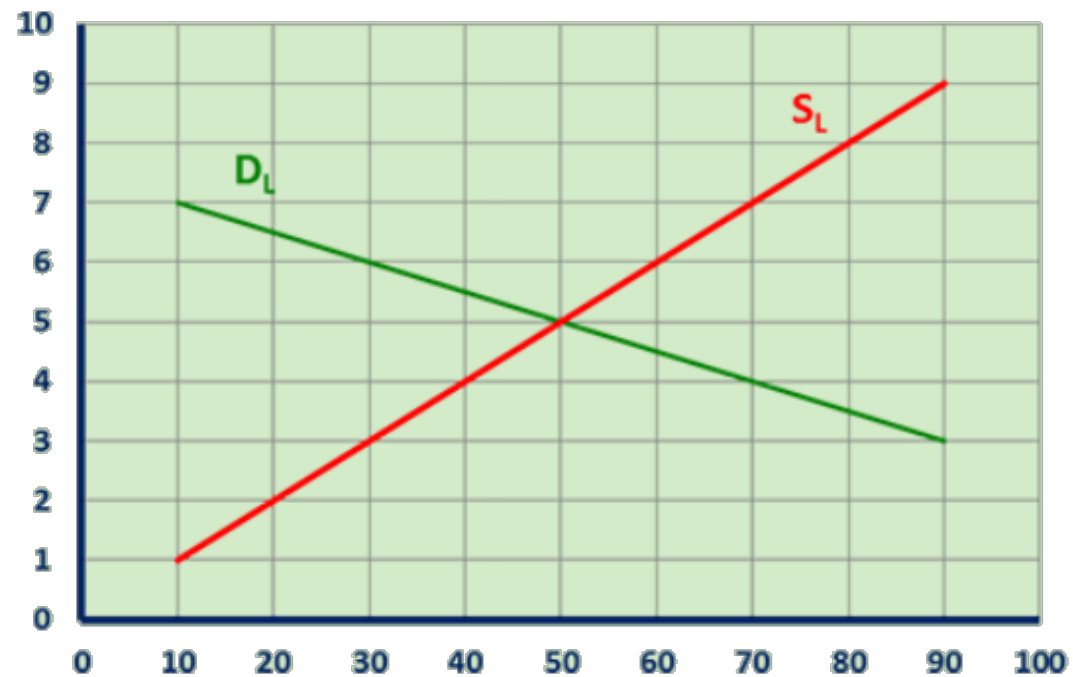
Problem 8. Assume that there are 1,000 identical firms in the economy so that if one firm hires, for example, 3 workers, all the firms in the economy will hire 3,000 workers. In this economy the equilibrium real wage equals _____ units and the equilibrium level of employment equals _____ persons.

Total Number of Workers Hired (Persons)	Total Amount of Output Produced (Tons)	Number of Workers Willing and Able to Work	Real Wage
0	0	0	10
1	80	1000	20
2	150	2000	30
3	210	3000	40
4	260	4000	50
5	300	5000	60
6	330	6000	70
7	350	7000	80
8	360	8000	90

Problem 9. The figure shows the labor market for a country, with labor measured in workers. The nominal wage is \$20 and the price level is \$4. If the supply of labor increases by 30 units, and the price level remains unchanged, what will be the new equilibrium nominal wage?



Problem 10. If the supply of and demand for labor both increase by 30 units, what is the new equilibrium number of jobs available?



Problem 11. Which of the following events could cause the demand for labor function to shift to the right?

- (a) an increase in the amount of complementary capital
- (b) an increase in the productivity of labor
- (c) a labor-using technological progress
- (d) all of the above
- (e) none of the above

Problem 12. Which of the following events could cause the supply of labor to shift to the right, all else equal?

- (a) an increase in net immigration
- (b) an increase in net birth
- (c) an increase in the labor force participation rate
- (d) all of the above
- (e) none of the above