

Problem 1. Which of the following will be included in 2009 GDP?

- (a) The value of a bookshelf that you build for yourself in 2009
- (b) The value of a boat that is produced in 2008 and sold in 2009
- (c) The value of a textbook that is produced in 2009 but not sold
- (d) The value of a used car that is sold in 2009
- (e) None of the above

Problem 2. Which of the following will NOT be included in 2009 GDP?

- (a) The value of lawn mowers that Briggs and Stratton made in 2009 but couldn't sell.
- (b) The value of a CPU produced in 2009 and used in the production of a PC.
- (c) The value of a piece of land Brad sold to Abe in 2009.
- (d) The value of a CPU produced in 2009 that was not used in any PC.
- (e) None of the above

Problem 3. *True or False?* If the amount of physical capital increases, demand for labor will increase if capital is substitute for labor.

Problem 4. *True or False?* If a labor-saving technological progress takes place, demand for labor will shift to the left.

Problem 5. *True or False?* An increase in the amount of complementary capital will cause a movement along the demand-for-labor function.

Problem 6. What are the sources of frictional unemployment?

Problem 7. What are the sources of structural unemployment?

Problem 8. In a country, the overall rate of unemployment is 3 percent. The frictional rate of unemployment is 1 percent and the structural rate of unemployment is 4 percent. The potential GDP in this country equal $Y_P = 100,000$ units. Moreover, economists have estimated the Okun's alpha to be $\alpha = 1.50$.

In this country, then, the cyclical rate of unemployment equals _____ percent and the real GDP equals _____ units.