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. What is the source of cyclical unemployment?

Problem 9. 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.

Problem 10. Define a **recession** and an **expansion**.