

Review Problems for Test #2

This review sheet is meant to give you an idea of the structure of the test, not to be a full review of the relevant material. The test is open-notes. We will use blue books. Bring a calculator if you like, but no computers or phones allowed. In order to get full credit, show the calculations used to arrive at your answers. Draw and label diagrams clearly.

A. Answer True, False, or Uncertain, and briefly explain your answer.

- (1) Compared to a competitive firm, a labor market monopsonist will pay lower wages and hire more workers.
- (2) In monopolistic competition, firms face downward-sloping demand curves and earn zero profits in long-run equilibrium.
- (3) An increase in the price level causes a downward shift of the aggregate demand curve.
- (4) When the aggregate supply curve is completely horizontal, shifts in aggregate demand cause only the price level, not national output, to change

B. Short answers.

- (1) Consider these two years of data. What is the GDP deflator for 2007?

Year	Nominal GDP (Billions of \$, current prices)	Real GDP (Billions of \$, 2005 prices)
2007	14,078	13,254
2005	12,638	12,638

- (2) List three things that could cause the aggregate demand curve to shift.
- (3) If a bond offers \$500 per year for three years, you have to pay \$1000 today for the bond, and the interest rate is 5%, what is the present value of this investment?
- (4) Illustrate what the following banking system's balance sheet would look like after the Federal Reserve makes an open market purchase of \$3000 worth of securities and the resulting multiplier effect has occurred.

Assets		Liabilities	
Reserves	\$15,000	Deposits	\$90,000
Loans	\$95,000	Capital	\$20,000
	\$110,000		\$110,000

C. Sampson & Sons, a monopolist with costs $C(Q) = 20Q + 10,000$, faces the market demand curve $Q = 1000 - 5P$.

(1) Solve for Sampson's optimal quantity and price.

(2) How much are Sampson's profits?

D. Assume the economy is modeled by $Y = C + I + G$, $C = C_0 + C_1Y$, $I = I_0$, $G = G_0$.

(1) If the consumption function is $C = 500 + .75Y$, what is the multiplier?

(2) Draw the graph for the consumption function.

(3) Draw the graph for the savings function.

(4) If $I = 400$ and $G = 300$, solve for the equilibrium level of national income.

(5) How much is savings (S)?

E. Assume the economy is initially in long-run equilibrium.

(1) Draw a graph illustrating this starting position.

(2) If the government increases its spending (G), what will happen in the short run?

(3) What will then happen to restore the economy to long-run equilibrium?

(4) Add to your graph from (1) to illustrate what happened in (2) and (3).

(5) Show on another graph what happened in the labor market and explain your graph.