

2016 AP® MACROECONOMICS FREE-RESPONSE QUESTIONS

2. The following is the balance sheet of First Superior Bank.

Assets	Liabilities and Equity		
Reserves	\$200	Demand deposits	\$2,000
Loans	\$1,800	Equity (net worth)	\$0

Assume that the required reserve ratio is 10 percent.

- (a) What is the dollar value of new loans that First Superior Bank can make? Explain.
 - (b) Mr. Smith deposits \$100 of cash in a demand deposit account in First Superior Bank. Calculate the maximum amount of new loans that First Superior Bank can now make.
 - (c) As a result of Mr. Smith's \$100 cash deposit, calculate the maximum change over time in each of the following in the banking system.
 - (i) Loans
 - (ii) Demand deposits
 - (d) As a result of Mr. Smith's \$100 cash deposit, calculate the maximum change over time in the money supply.
 - (e) Provide one reason why the actual change in money supply can be smaller than the maximum change you identified in part (d).
-

3. The following table shows the number of donuts or cupcakes that John and Erica can each produce in one day.

	Donuts	Cupcakes
John	200	100
Erica	150	50

- (a) Who has the absolute advantage in producing donuts? Explain.
- (b) Who has the comparative advantage in producing donuts? Explain.
- (c) Assume that John and Erica decide to specialize according to their comparative advantages and that one cupcake is exchanged for four donuts.
 - (i) Indicate whether or not specialization and trade are beneficial to John.
 - (ii) Indicate whether or not specialization and trade are beneficial to Erica.
- (d) Assume that Erica discovers a new cupcake production technique that will increase her daily production of cupcakes only. Using donuts on the horizontal axis, draw a correctly labeled production possibilities curve for Erica, before and after the technology change in cupcake production.

STOP

END OF EXAM

**AP[®] MACROECONOMICS
2016 SCORING GUIDELINES**

Question 3

5 points (1+1+2+1)

(a) 1 point:

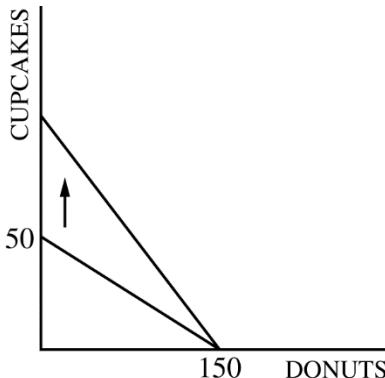
- One point is earned for stating that John has the absolute advantage in producing donuts and for explaining that John can produce more donuts than Erica in one day ($200 > 150$).

(b) 1 point:

- One point is earned for stating that Erica has a comparative advantage in producing donuts and for explaining that Erica's opportunity cost of producing one donut ($1/3$ of a cupcake) is less than John's opportunity cost of producing one donut ($1/2$ of a cupcake).

(c) 2 points:

- One point is earned for indicating that John will benefit from specialization and trade.
- One point is earned for indicating that Erica will not benefit from specialization and trade.



(d) 1 point:

- One point is earned for drawing a correctly labeled graph of Erica's production possibilities curve, before the technology change, and for rotating the production possibilities curve outward showing greater production of cupcakes after the technology change.