

Name:

ECON 201
12/9/2003

Prof. Gordon
Final Exam

Section#:

Directions: Answer the Multiple choice questions on this sheet. Answer the short answers on the paper on which they are printed, boxing your answers (write your initials in upper right corners on each of those pages for extra security in case papers get separated). Budget your time carefully. GOOD LUCK!

Multiple Choice Answer Sheet

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Multiple Choice Section: 54 questions, 81 points

- 1 The short-run aggregate supply curve is upward sloping because
- A. a lower price level creates a wealth effect.
 - B. lower taxes motivate people to work more.
 - C. money wages do not immediately change when the price level changes.
 - D. most business firms operate with long-term contracts for output but not labor.
- 2 A change in the full-employment quantity of labor ____ the short-run aggregate supply curve and ____ the long-run aggregate supply curve.
- a) shifts; shifts
 - b) shifts; does not shift
 - c) does not shift; shifts
 - d) does not shift; does not shift
- 3 According to the wealth effect, an increase in the price level ____ real wealth and ____ consumption expenditure.
- a) increases; increases
 - b) increases; decreases
 - c) decreases; increases
 - d) decreases; decreases
- 4 Economic growth will occur and the price level will be constant when the increase in aggregate demand
- a) exactly equals the increase in long-run aggregate supply.
 - b) is more than the increase in long-run aggregate supply.
 - c) is less than the increase in long-run aggregate supply.
 - d) is accompanied by a decrease in short-run aggregate supply.
- 5 Which of the following would lead to a downward shift in the nation's production function?
- a) Workers have more physical capital to work with
 - b) Workers have engaged on in on-the-job training
 - c) Workers have less human capital than before
 - d) The size of the labor force has decreased
- 6 Because the marginal product of labor decreases as the quantity of labor employed increases, the quantity of labor a firm demands
- a) rises as the real wage rate falls.
 - b) rises as the money wage rate rises.
 - c) can either rise or fall as the real wage rate changes depending on what is happening to the money wage rate.
 - d) none of the above because the marginal product of labor is independent of the quantity of labor demanded.

- 7 A rise in the real wage rate increases the labor-force participation rate because the higher real wage rate
- a) reduces the value of other activities.
 - b) makes time spent working relatively more valuable.
 - c) reduces the productivity of leisure time.
 - d) All of the above contribute to a rise in the labor-force participation rate.
- 8 When a worker is paid an efficiency wage,
- a) labor turnover is higher.
 - b) the real wage rate is less than the equilibrium wage rate.
 - c) the real wage rate the worker is paid is greater than the equilibrium real wage rate.
 - d) the quantity of labor demanded will be greater than the quantity supplied.
- 9 Which of the following explains why investment demand is negatively related to the real interest rate?
- a) A lower real interest rate makes more investment projects profitable and hence undertaken.
 - b) Consumers are willing to spend less and hence save more at higher real interest rates.
 - c) Interest rate flexibility in financial markets assures an equilibrium in which saving equals investment.
 - d) All of the above are correct reasons why investment demand is negatively related to the real interest rate.
- 10 The investment demand curve shifts rightward if
- A) the expected profit rate increases.
 - B) the real interest rate falls.
 - C) savers increase their thriftiness.
 - D) the economy moves into a recession.
- 11 Which of the following has a positive relationship with household saving?
- | |
|---|
| I. the real interest rate
II. disposable income
III. expected future income |
|---|
- A) I and II.
 - B) II only.
 - C) II and III.
 - D) I, II and III.

- 12 The Ricardo-Barro effect proposes that
- a) people expect government dissaving to increase their incomes.
 - b) interest rates will probably increase because of government deficits.
 - c) people expect lower disposable incomes in the future if the government runs a deficit.
 - d) tax payers do not have the ability to neutralize the effects of government deficits.
- 13 According to the crowding out effect, if there is a government deficit, the real interest rate will _____ and investment will _____ .
- A) rise; rise
 - B) fall; rise
 - C) rise; fall
 - D) stay the same; stay the same
 - E) fall; fall
- 14 The definition of M2 includes
- A) M1.
 - B) savings deposits.
 - C) time deposits.
 - D) All of the above.
- 15 Your checking account is
- A) an asset for you and a liability for your bank.
 - B) a liability for you and an asset for your bank.
 - C) an asset for both you and your bank.
 - D) a liability for both you and your bank.
- 16 Banks make additional loans when required reserves
- A) exceed actual reserves, a situation of negative excess reserves.
 - B) are less than actual reserves, a situation of negative excess reserves.
 - C) exceed actual reserves, a situation of positive excess reserves.
 - D) are less than actual reserves, a situation of positive excess reserves.
- 17 The larger the required reserve ratio, the
- A) smaller is the deposit multiplier.
 - B) larger is the deposit multiplier.
 - C) larger is the amount of total deposits that can be created from a new deposit.
 - D) larger is the amount of total money that can be created from a withdrawal.

18 In the short run, an increase in the quantity of money ____ real GDP and ____ the price level.

- A) increases; raises
- B) does not change; lowers
- C) decreases; raises
- D) decreases; lowers

For questions 19-20, assume that Helgeville and Sorinland are the only countries in the world.

Helgeville		Sorinland	
Peaches (bushels per year)	Cream (gallons per year)	Peaches (bushels per year)	Cream (gallons per year)
80	0	40	0
60	20	30	15
40	40	20	30
20	60	10	45
0	80	0	60

19 Based on the information in the table and according to the principle of comparative advantage

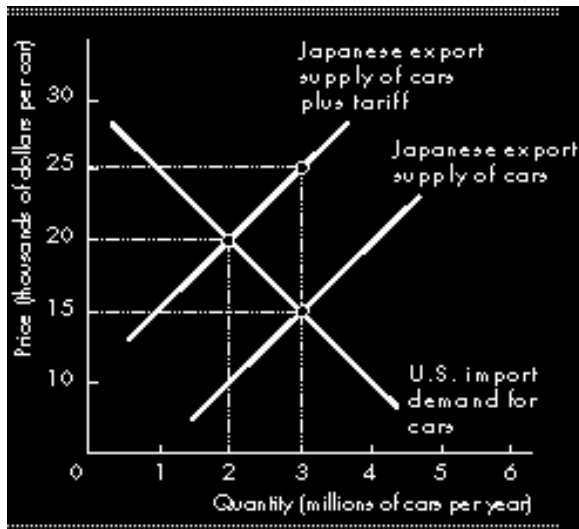
- a) Helgeville should produce both peaches and cream.
- b) there is no basis for trade between these two nations.
- c) Helgeville should produce cream and Sorinland should produce peaches.
- d) Helgeville should produce peaches and Sorinland should produce cream.

20

<ul style="list-style-type: none"> i. The opportunity cost of a bushel of Peaches is a gallon of ice cream in Sorinland ii. According to the theory of comparative advantage, Helgeville should produce both goods and not trade with Sorinland iii. The international price of a bushel of peaches should be no higher than 1.5 gallons of ice cream per bushel when both goods are produced in positive quantities.
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- a) i. and ii.
- b) ii. only
- c) iii. only
- d) i. and iii.
- e) ii. and iii.

For questions 21-22, use the following graph:



- 21 In the above figure, as a result of the U.S. imposition of a tariff on Japanese cars, the quantity of Japanese cars imported into the United States will
- be 0 cars per year.
 - be 2 million cars per year.
 - be 3 million cars per year.
 - no longer be represented by the demand curve illustrated in the figure.
- 22 What quota would generate the same quantity of imports as the tariff change in the above figure?
- A quota of 0 cars.
 - A quota of 1 million cars.
 - A quota of 2 million cars.
 - A quota of 3 million cars.
- 23 The main reasons for the negative slope of the _____ curve are _____ and _____.
- SAS; a flexible price; a fixed nominal wage in the short run
 - savings supply; wealth effects; substitution effects
 - AD; the fixed nominal wage in the short run; multiplier effects
 - AD; wealth effects; substitution effects
 - none of the above
- 24 The difference between actual and planned expenditure is equal to
- X-M
 - M-X
 - unplanned inventory change
 - excess reserves of depository institutions
 - none of the above

- 25 If autonomous expenditure changes (for any reason), the multiplier effect determines the size of
- a) a shift of the long run aggregate supply curve
 - b) a shift of the short run aggregate supply curve
 - c) a shift of the aggregate demand curve
 - d) the movement along the aggregate demand curve
 - e) c and d

- 26 (True/False) Suppose the economy is currently below full employment. Then the structural budget surplus is smaller than the actual budget surplus.

Consider two economies, Benjiland and Proteinland. Benjiland is a closed economy (that is, there are no exports or imports) whereas Proteinland trades with the rest of the world. Also, all taxes in Benjiland are lump-sum whereas taxes in Proteinland are induced. The marginal propensity to consume, investment, government expenditures and autonomous consumption are equal in both economies.

- 27 Suppose the governments of both countries increase expenditure by the same amount, then if prices are fixed
- a) equilibrium GDP increases by more in Benjiland than in Proteinland
 - b) equilibrium GDP increases by less in Benjiland than in Proteinland
 - c) equilibrium GDP increases by the same amount in both countries
 - d) cannot tell / not enough information

- 28 A decrease in lump sum taxes is an example of

- a) contractionary fiscal policy
- b) expansionary fiscal policy
- c) a change in induced taxes
- d) a and c
- e) b and c

- 29 Consider an open economy and suppose that the equilibrium world interest rate is affected by changes in national savings (that is, it is a 'large' country like the US). If there is a (perfect) Ricardo-Barro effect, then an increase in government expenditure will _____ the equilibrium world interest rate and _____ the quantity of domestic private investment.
- a) increase; decrease (crowd out)
 - b) not change; decrease
 - c) increase; not change
 - d) not change; not change

30 (True/ False) Fiscal policy does not influence economic growth because in the long run, prices and wages adjust, and GDP is equal to potential GDP.

31 (True/False) If US official reserves increase, the US official settlement account balance is negative.

32 The demand for US dollars is negatively related to the US exchange rate because of

- | |
|---|
| <ul style="list-style-type: none">i) the interest rate differentialii) the exports effectiii) the expected profit effectiv) changes in the expected future exchange rate |
|---|

- a) ii. and iv.
- b) i. and iv.
- c) ii. and iii.
- d) i., ii., iii., and iv.

33 Consider the market for Dollars with the exchange rate quoted in Yen per Dollar. Suppose the expected future exchange rate decreases. Then, the current equilibrium exchange rate will _____ and the equilibrium quantity of dollars traded in the market will _____

- a) increase; increase
- b) decrease; decrease
- c) increase; decrease
- d) decrease; increase
- e) decrease ; cannot tell
- f) increase; cannot tell
- g) cannot tell, cannot tell

34 Consider the market for Dollars with the exchange rate quoted in Yen per Dollar. If the Federal Reserve buys foreign (Japanese) securities, then the Yen will

- a) appreciate
- b) depreciate
- c) not be affected

35 Suppose that the exchange rate between the U.S. dollar and the Euro is 1.5 \$/Euro. Suppose protein drinks cost 4.5 Euro/drink. What is the dollar price of the protein drink?

- a) 3
- b) 1
- c) 6.75
- d) 1.5

36 Labor productivity is:

- A. aggregate production function divided by hour of labor
- B. real GDP per hour of labor
- C. change in capital divided by change in hour of labor
- D. equal to L in the equation $Y=F(L,K,T)$

37 The productivity curve

- A. is given by the labor productivity
- B. shows the change in real GDP per hour of labor as the amount of capital per hour labor changes
- C. shows the change in technology
- D. is given by the equation $Y=F(L,K,T)$

38 Productivity can grow:

- A. if capital per hour of labor increases
- B. if there are no technological advances
- C. if capital per hour of labor decreases
- D. if real GDP per hour labor decreases and capital per hour of labor increases

39 Which of the following is NOT a source of economic growth?

- A. investment in new capital
- B. labor productivity
- C. investment in human capital
- D. technological advances

For questions 40-42 use the following data

Government purchases	1000
National Savings	500
Net Exports	400
Consumption	600
Net Taxes	300

40 Investment is

- A. 100
- B. 200
- C. 400
- D. 500
- E. 1,000

- 41 Saving is:
- A. 300
 - B. 400
 - C. 600
 - D. 900
 - E. 1,200
- 42 GDP is:
- A. 1,800
 - B. 1,900
 - C. 2,000
 - D. 2,100
 - E. 2,500
- 43 Depreciation is:
- A. a decrease in the stock of capital
 - B. gross investment
 - C. net investment
 - D. an increase in the stock of capital
- 44 The article read aloud in class on “America’s Sugar Daddies” was about a problem created by
- A. taxes
 - B. tariffs
 - C. quotas
 - D. price ceilings
- 45 Data on the unemployment rate is collected from
- A. a survey of households at home
 - B. a survey of individuals outside the home
 - C. a survey of business firms at each firm’s headquarters
 - D. a survey of business firms at each store, office, or factory

- 46 Compared to recessions in the 1970s and 1980s, the economy in 2001-03 has hurt _____ more and _____ less
- A. unionized blue-collar workers; white-collar salaried workers
 - B. government workers; high school dropouts
 - C. high school dropouts; unionized blue-collar workers
 - D. white-collar salaried workers; unionized blue-collar workers
- 47 Rapid real GDP growth in the second half of 2003 can be attributed to
- A. monetary policy stimulus
 - B. fiscal policy stimulus
 - C. depreciation of the dollar
 - D. all of the above
- 48 The defeat of California's Gov. Grey Davis by Arnold Schwarzenegger reflected in large part
- A. The stock market boom and subsequent collapse
 - B. The California electricity crisis and blackouts of 2001
 - C. A crisis for the California movie industry as people spent more time surfing the web
 - D. Support by Californians for Bush Administration tax cuts
- 49 Which provides the best explanation of the failure of many poor countries to experience economic growth as rapid as the rich countries
- A. Classical growth theory
 - B. Neoclassical growth theory
 - C. New growth theory
 - D. Market failure
- 50 The multiplier for a change in Social Security benefits is equal to the multiplier for a change in the same direction in salaries of Evanston police officers times
- A. the marginal propensity to save
 - B. minus the marginal propensity to save
 - C. the marginal propensity to consume
 - D. minus the marginal propensity to consume
- 51 Since early 2002 the U. S. dollar has
- A. appreciated against the euro
 - B. depreciated against the euro
 - C. depreciated against the Chinese yuan
 - D. B and C

52 In recent years the U. S. has had

- A. A trade deficit
- B. A current account deficit
- C. A capital account deficit
- D. A and B
- E. A and C

53 Pres. Bush's tax cuts would be expected to _____ in the short run and to _____ in the long run.

- A. reduce consumption, raise investment
- B. raise consumption, raise interest rates
- C. reduce interest rates; raise investment
- D. reduce investment, reduce interest rates

54 Who is your favorite TA?

- a) Benji
- b) Helge
- c) John
- d) Sorin
- e) The one who's grading this exam
- f) What's a TA?

Short Answer Section: 6 questions (I – VI), 39 possible points

- I. Benjiopolis has a closed economy with an $MPC=b$ and no income taxes. Currently, Benjiopolis' government has a budget deficit of \$50 million. Suppose that Benjiopolis now decides to run a balanced budget by decreasing government purchases by \$50 million.
- A. (2 points) On a graph of aggregate expenditure versus real GDP, show the effect that the decrease in government purchases will have on the level of aggregate planned expenditure in the economy if price levels remain constant. Label the original planned expenditure A and the new planned expenditure after the decrease in government purchases B.
- B. (2 points) On a graph of the price level versus real GDP, show the effect that the decrease in government purchases will have on the short run equilibrium real GDP and price level using aggregate supply and aggregate demand curves. Label the original equilibrium C and the new equilibrium D.
- C. (1 point) The new planned expenditure that you found in part 1 (point B) will be _____ the new equilibrium real GDP found in part 2 (point D).
- A) less than
 - B) greater than
 - C) equal to
 - D) not enough information

III. Int'l Trade Short Answer question

In your prior work, you used our tools to understand the decisions made by people and later countries. One of the convenient things about these tools is that they can also be used to understand how firms behave as well. The following problem will use the international trade tools you've developed in this class:

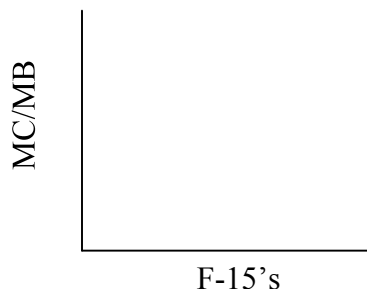
Suppose that Johnny P.'s defense contracting firm (henceforth named JPD) has the PPF given by the data:

	Money (M)	F-15's (F)
a	36	0
b	35	1
c	32	2
d	27	3
e	20	4
f	11	5
g	0	6

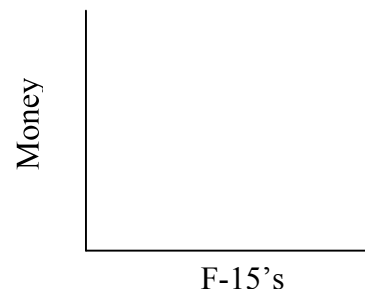
- A. (3 points) Calculate the (marginal) opportunity cost to JPD of producing another F-15 in Money per F-15; one is already done for you; use your results to sketch a marginal cost curve on graph 1.

	Opp. Cost in Money/F-15
a	--
b	2
c	
d	
e	
f	
g	--

Graph 1 (MC/MB)



Graph 2 (PPF and Budget Line)



- B. (2 points) Instead of maximizing enjoyment, the goal of our firm is to most efficiently gain profit through investing money into producing F-15's and then selling them. Note that this requires a slightly different interpretation of money than the PPF might give, but that the use of our tools remains the same. Suppose that buyers in the black market will purchase any F-15's from our firm for \$4. In Graph 1, draw the equivalent of a marginal benefit

- C. (1 points) Given the marginal benefit curve from #2 and the PPF from #1, what would be JPD's profit-maximizing (i.e. efficient) production point. (hint: don't forget that JPD will have both money left over from production and will also receive money for selling the F-15's).

Money	
F-15's	

- D. (3 points) On graph 2, sketch the ppf, then draw a budget line through the efficient point. Indicate the point where it intersects with the PPF and the point JPD will be at after trade (selling the F-15's). How much money will JPD have after selling the F-15's?

IV. Consider the following economy, where prices are fixed:

$$C=10+5/6*(\text{Disposable Income})$$

$$T=1/5*Y$$

$$I=10$$

$$G=30$$

$$X=10$$

$$M=1/3*Y$$

- A. (1 point) The marginal propensity to save is _____.
- B. (1 point) Autonomous expenditure is equal to _____.
- C. (2 points) Equilibrium GDP is equal to _____.
- D. (1 point) National Savings is equal to _____.
- E. (1 point) The budget deficit is equal to _____.
- F. (1 point) The multiplier on autonomous expenditure is _____.
- G. (1 point) Suppose Exports increase to a level of 20; then, equilibrium GDP increases by _____.
- H. (2 points) Suppose that Exports are 10 again, as in the initial setup. Suppose GDP (Y) were 60. Then, actual Investment (accounting for change in inventories) would be _____.

V. GDP Accounting/Growth Short Answer

GDP Data for 2001		
	Quantity	Price
Potatoes	50	2
Radios	100	20

GDP Data for 2002		
	Quantity	Price
Potatoes	100	4
Radios	80	25

- A. (1 point) Nominal GDP in 2001 is _____.
- B. (1 point) Nominal GDP in 2002 is _____.
- C. (2 points) Real GDP in 2002 with base 2001 is _____.
- D. (2 points) Real GDP in 2001 with base 2002 is _____.
- E. (2 points) The GDP Deflator in 2002 using the base method (base year is 2001) is _____.
- F. (2 points) The (base year 2001) economic growth rate is _____.

Solutions to Exam

Multiple choice

1. C
2. A
3. D
4. A
5. C
6. A
7. B
8. C
9. A
10. A
11. A
12. C
13. C
14. D
15. A
16. D
17. A
18. A
19. D
20. C
21. B
22. C
23. D
24. C
25. C
26. false
27. A
28. B
29. D
30. false
31. true
32. C
33. E
34. A
35. C
36. B
37. B
38. A
39. B
40. A
41. E
42. D
43. A
44. C
45. A
46. D
47. D
48. A
49. D
50. C
51. B

52. D

53. B

54. any answer accepted

Solutions to Short answers

I. Short answer about Benjiopolis

A. The problem wasn't explicit enough to ask for the slope of the AE curve. To get full credit, the graph must have the vertical axis labeled

as aggregate planned expenditure (also accept aggregate expenditure), the

horizontal axis labeled as real GDP, the 45 degree line, two AE curves (with the same slope), with the intersection of the higher AE curve and the 45 degree line labeled A and the intersection of the lower AE curve and the 45 degree line labeled B. Here are the deductions that should be

taken:

-1 no labels on axes but otherwise correct

-1 if points A and B are switched

-2 if they don't have two AE curves with the same slope (i.e. if one curve is a rotation rather than a shift of the other or if they only have

one curve)

-2 if they don't show the intersection of the AE curves and the 45 degree line

-2 if the AE curves are downward sloping

Don't take off points if they attempted to give the slope or the intercept of the AE curves but didn't come up with the correct expressions. If the two points of intersection are labelled, it is not necessary for them to also label the corresponding values on the axes (the problem wasn't explicit about how the change in planned expenditure

should be shown)

B. For full credit: y-axis labelled as price level, x-axes labelled

as

real GDP, an upward sloping SAS curve, to downward sloping AD curves with

the same slope, the two intersections with the SAS curve labelled (the equilibrium with the higher GDP labelled C and the other labelled D).

Deductions:

-1 no labels on axes but otherwise correct

-2 if supply curve shifts instead of demand

-2 if curves are labelled incorrectly (SAS is labelled as AD and AD is labelled as SAS)

-1 if equilibria are switched

-2 if no equilibria are labelled

Don't deduct for attempts to write expressions for the shifts in the AD curve. If the two equilibria are labelled, it is not necessary for them to also label the corresponding values on the axes (the problem wasn't explicit about how the change in real GDP and prices should be shown).

Also, it doesn't matter if they have a long run AS curve drawn, as this

wasn't asked for.

C. A (no partial credit)

II. answers are as below; be sure to give partial (2/3) credit if they get the right answers but forget the minus sign. (a-d are in billions of braun; e is just a number)

a. -2.5

b. -0.875

c. -.125

d. -3.375

e. 3.375

H = 100000

c = 0.5

RRR = 0.1

D = 100/0.6 = 166667

C = 0.5D = 83333

M = 1.5H/.6 = 250000

Money multiplier = 2.5

III. International Trade Short answer

A. All the right numbers should be in the chart (if one was wrong, take off just one point; if negative signs, take off one point). The third point is given for an increasing MC curve on graph 1 that seems to fit the data: if there are no labels, then use the curve that looks like it fits the data)

b	2
c	4
d	6
e	8
f	10

B. Answer should be a flat curve sketched on graph 1: Give 1 point if \$4 is written somewhere. Give the full 2 points only for a completely flat curve on graph 1; give zero in any case other than the above 2; if curve is unlabelled, use your judgement as to which is the MC curve so that the other one is MB curve

C. This should be the point at which MC=MB. Because of the confusion, I gave 1 point credit to any student who had either (2, 32) or (2, 40) (there were only two or three of the latter). Some students who put (27,3) here had the wrong MC curves in part A, but they still didn't have MB=MC at the point they gave (if they do, go ahead and give them the point).

D. There are three points here, and they are awarded in strictly binary circumstances:

- i. are there both a PPF and a Budget line that is tangent to the PPF on the graph? Tests to see if students recognized that tangency was necessary condition of efficiency points don't need to be perfect, but this tangency condition is very important.
- ii. Is the point at which JPD arrives after trade clearly labeled and on the budget line? Tests for whether students recognize that it should be on the budget line (which was the definition they were given during test)
- iii. Is \$40 given for money made after the sale? This is because JPD will have \$32 they did not invest in production, and then they sell their two F-15's.

IV. Short answer on multiplier calculations

- B. 60 (1/1)
- C. 90 (2/2)
- D. -10 (1/1)
- E. 12 (1/1) (no point for -12!)
- F. 3/2, 1.5 (1/1)
- G. 15 (1/1) (no point for 30!)
- H. -10 (2/2) (no partial credit!)

V. Short Answer on GDP growth and accounting

A. nominal GDP = 2,100

give 1 point only for this value

B. nominal GDP = 2,400

give 1 point only for this value

C. real GDP = 1,800

give 2 points only for this value

D. real GDP = 2,700

give 2 points only for this value

E. GDP deflator = 133.33%

give 2 points for the following values: 133%,133.3%,133.33%,133.333%, (133.333..%), 133.34%,133.4%

F. economic growth = -14.29%

give 2 points for the following values: -14%,-14.2%,-14.29%, -14.3%
if there is no (-) sign no point should be given

*from a later e-mail:

Also might give 1/2 points if at SA-V E,F they have correct numbers but not in percentage?

The problem for A-E is that some students did calculation errors. Students wrote the formulas correctly, plugged in the correct numbers but got wrong results (for example $50 \cdot 4 = 100$ and get 2,600 instead of 2,700 at D). I am reluctant to give full-point for this for the reason that they are not asked to write the formulas but only the result. Unless all students who did some mistakes here wrote formulas and we can judge all of them by that then we can discuss.

Suggestions? (that's why I say we should meet and discuss these cases)