The University of the State of New York

REGENTS HIGH SCHOOL EXAMINATION

BUSINESS ARITHMETIC

Friday, June 18, 1971 — 1:15 to 4:15 p.m., only

Instructions for Part I — Mental Calculation Test

Do not turn this sheet over until the signal is given.

All questions on Part I are to be worked mentally and the *answers only* placed on the back of this sheet. At the end of 15 minutes, work must stop and the answer sheet used for this part of the examination must then be **immediately** handed to the examiner.

Be sure to write your name in the proper space on the back of this sheet.

Do not begin work on the test until your teacher tells you to do so.

All answers must be written with pen and ink.

Part I
MENTAL CALCULATION TEST

Pupil...

Directions (1–20): Write the correct answer to *each* of the following in the blank space at the right of each question. No written computations are allowed. [20]

1 Add: 23
        728
         64
       1198
        452

1................

2 Subtract: 98
           —12⅓

2................

3 An invoice dated March 23 with terms of ³⁄₁₅, ¹⁄₃₀, N/₆₀ must be paid by what date in order to receive the largest amount of discount? (April 7; April 8; April 22; April 23)

3................

4 What will be the cost of 16 yards of cloth at 12½ cents a yard?

4................

5 How much would a customer pay for five items priced at 3 for 36¢?

5................

6 A customer hands the cashier a $20 bill for a purchase amounting to $13.51. What amount of money will he get back?

6................

7 What is 85.14 multiplied by 100?

7................

8 What is the cost of 20 gallons of syrup at $1.25 per gallon?

8................

9 What is 16 increased by ¼ of itself?

9................

10 What is 28% expressed as a fraction in *simplest form?*
   (²⁸⁄₁₀₀; ¹⁴⁄₅₀; ⁷⁄₅₀; ⁷⁄₂₅)

10................

11 An architect, in preparing a set of plans, uses a scale of ¼ inch = 1 foot. How long a line would he need to draw on these plans to indicate a distance of 18 feet?

11................

12 What is the cost of 5,000 rubber bands at $5.00 per M?

12................

13 If a merchant can buy coffee at $.83⅓ per lb., how much would he pay for 48 lb.?

13................

14 If a sales tax of 6% is added to an article costing $300, what is the total cost?

14................

15 What is the cost of 48 quarts of maple syrup at $6.00 per gallon?

15................

Directions (16–20): What is the interest on *each* of the following?

16 $360 for 90 days at 6%

16................

17 $428 for 15 days at 6%

17................

18 $210 for 60 days at 8%

18................

19 $600 for 93 days at 6%

19................

20 $750 for 60 days at 9%

20................

BUSINESS ARITHMETIC

Friday, June 18, 1971 — 1:15 to 4:15 p.m., only

The answers to the questions on the following parts of this examination are to be written in the separate answer booklet. Now complete the heading of your answer booklet. When you have finished the heading, you may begin the examination immediately.

Part II

Answer all questions in this part. Scrap paper may be used. Write only your answers in the separate answer booklet. [40]

1 A rug dealer bought a rug listed at $240, less 33⅓% and 25%. What is the invoice price of the rug?

2 What single percent of discount is equivalent to the series 25% and 20%?

3 On January 2, Pierce received a notice that his total property tax for the year was $764.34. This amount is due by January 31. There is a penalty of 1% for late payments. Pierce paid his tax on February 10. What was the amount of his payment?

4 Johnson's property, worth $21,000, is assessed for 33⅓% of its true value. If the local tax rate is $49.72 per $1,000 of assessed valuation, what is the amount of Johnson's tax bill?

5 Barrows paid $3,260 for 100 shares of stock. In addition, the commission on this purchase amounted to $48. What was the average price per share paid for this investment?

6 While making a trip of 5,185 miles, Smith found that his car traveled an average distance of 17 miles on each gallon of gasoline. If Smith paid $.35 per gallon, what was his total cost for gasoline on this trip?

7 Mr. Hansen's electric meter read 11,415 kilowatt-hours on November 1, and one month later it read 11,731 kilowatt-hours. If this electricity cost 3½ cents per kilowatt-hour, what was the amount of Mr. Hansen's electricity bill for November?

8 Ames and Hall were partners in a retail hobby shop in which Ames had invested $5,000 and Hall had invested $8,000. The partners agreed that the net profit would be divided in proportion to their investments. If the net profit for 1970 amounted to $8,060, what amount of money did Ames receive as his share of this profit?

9 A house worth $15,000 is insured for 80% of its value. What is the yearly premium for this policy if the annual rate is $.40 per hundred?

Base your answer to question 10 on the portion of the weekly income tax withholding table given below.

Weekly Payroll Period................

And the number of withholding exemptions claimed is................

And the wages are................

At least	But less than	0	1	2	3	4	5	6
$70	$72	$12.80	$10.50	$8.20	$5.90	$3.50	$1.20	0
72	74	13.10	10.80	8.50	6.20	3.90	1.60	0
74	76	13.50	11.20	8.90	6.60	4.30	2.00	0
76	78	13.90	11.60	9.20	6.90	4.60	2.30	0
78	80	14.20	11.90	9.60	7.30	5.00	2.70	.40

10 How much should be withheld from the pay of an employee who earns $75.50 and claims three exemptions?

11 What is the due date for a 120-day promissory note dated July 31?

12 A salesman receives a salary of $60 a week plus a 10% commission on sales exceeding $400. Last week his sales amounted to $1,400. What were his gross earnings?

13 An invoice for $350, dated October 23, has terms of 3/10, 1/30, N/60. For what amount should a check, written on November 1 in full payment for this invoice, be made out?

14 Holden, a retailer, purchased hats at $6.84 each. At what price must he sell each hat in order to make a profit of 33⅓% based on the cost?

15 What total amount of money will be on deposit at the end of six months if $1,600 is left on deposit at 5% interest compounded quarterly?

16 What percent more than 250 is 325?

17 A three-month note dated March 21, 1971 is discounted at the bank on April 10. For how many days did the bank hold the note?

18 If a bankrupt business can pay 37½% of its debts, what amount of money should a creditor receive if his claim amounts to $480?

19 A pupil received the following grades: typewriting 83%, business arithmetic 81%, English 92%, and science 75%. What grade must she earn in shorthand to attain an overall average of 85%?

20 The selling price of a color TV set is $630. It costs the store ⅔ of this amount. Indicate the cost by using the code word " BLUEPRINTS " for the figures 1 through 0.

Part III

This part consists of five groups of questions. Choose four of these five groups. Be sure to answer all questions in each group chosen. Use scrap paper for your work. Write only your answers in the answer booklet. [16]

Group 1

Directions (21–22): Base your answers to questions 21 and 22 on the information below.

Jackson offers a camera on the installment plan for a total cost of $129.95. Howard offers a similar camera on the installment plan for a total cost of $134.

21 If Jackson requires a down payment of $12.95 and the balance to be paid in 52 equal regular weekly payments, what will be the amount of each weekly payment?

22 If Howard requires a 10% down payment of the total cost, and the balance to be paid in equal monthly payments of $10.05 each, how many months will it take to complete the payments for the camera?

Group 2

Directions (23–24): Base your answers to questions 23 and 24 on the information below.

A florist bought a new delivery truck for $5,200. He estimated that the truck would depreciate $1,000 the first year, $800 the second year, $600 the third year, $500 the fourth year, and $500 the fifth year.

23 What would be the estimated trade-in value of this truck at the end of the third year?

24 What is the amount of the average yearly depreciation for the 5-year period?

Group 3

Directions (25–26) : Base your answers to questions 25 and 26 on the portion of the bank reconciliation statement for Wilson Cross shown below.

Wilson Cross
Bank Reconciliation Statement
October 1, 1970

Checkbook balance		$464.75	Bank statement balance		$650.93
Add			Deduct		
Deposit not recorded	$37.00		Outstanding checks	$ 6.75	
Error in writing check	9.90			32.80	
				19.20	
Deduct				166.80	
Service charge	$ 1.87			3.95	
Check not recorded	23.00			12.48	
Deposit recorded twice	77.83				
Correct checkbook balance			Available bank balance		

25 What is the total amount of the outstanding checks? | 26 What is the correct checkbook balance?

Group 4

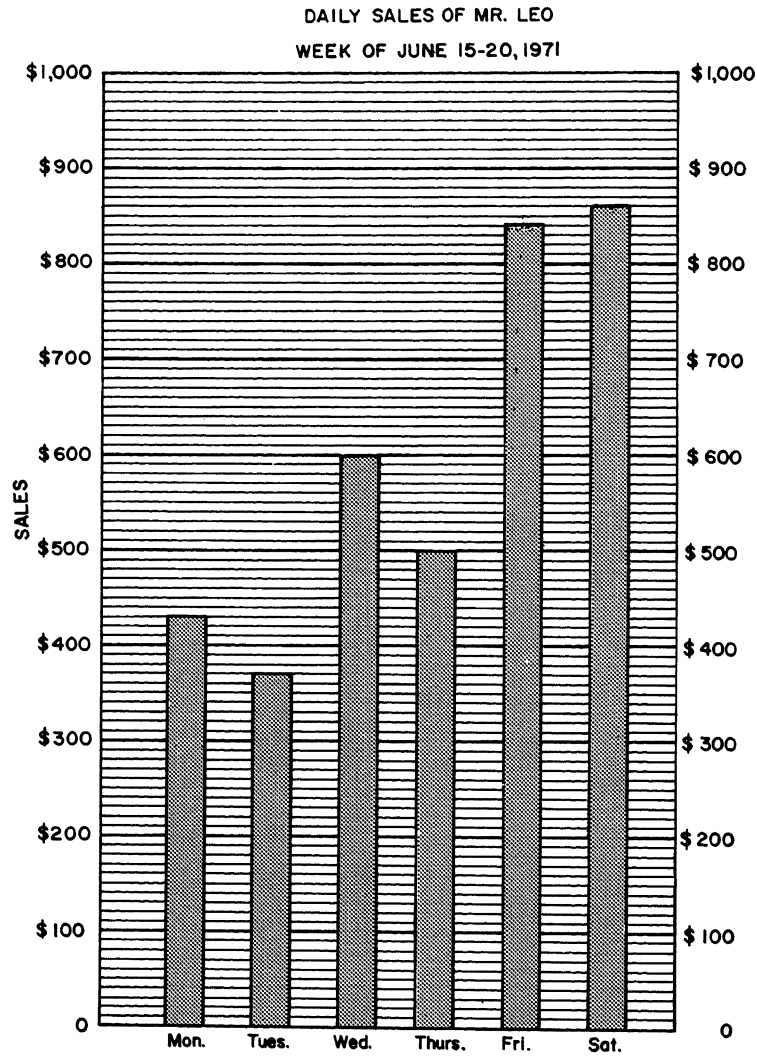*Directions* (27–28) : Base your answers to questions 27 and 28 on the information below :

  In shopping for a color television set Smith discovers that if he pays cash in the Adams Appliance Store, he can buy a set marked at $450 for a net price of $427.50. Baker's Radio and Television Store will sell him a similar set for $440 less a cash discount of 4%.

27 What percent of cash discount is being offered by the Adams Appliance Store?

28 What is the net cost of a set from Baker's, if Smith pays cash for his purchase?

☞ GO RIGHT ON TO THE NEXT PAGE.

Group 5

Directions (29–32): Base your answers to questions 29 through 32 on the graph below.

DAILY SALES OF MR. LEO
WEEK OF JUNE 15-20, 1971

29 By what amount did Friday's sales exceed Wednesday's sales?

30 What was the amount of Mr. Leo's average daily sales for the week?

31 If Mr. Leo earns an 8% commission, what was the commission on Tuesday's sales?

32 What was the percentage of increase in Mr. Leo's sales on Saturday over Monday?

Part IV

Answer any four of the five questions in this part. All work must be shown in the answer booklet. [24]

33 Joseph Benson reported that 465 student tickets at $.50 each and 174 adult tickets at $.75 each had been sold for the annual senior-faculty basketball game. Expenses for the game were as follows: fees for officials, $30; tickets, $8.50; and rental of two microphones at $7.50 each. What net profit did the senior class realize from sponsoring this game?

34 Mr. Case sold $18,000 worth of bonds, which had been paying him 4% annual interest, and bought a house with the money. During 1970, the annual expenses of owning his home included:

Real estate taxes	$398
Insurance	78
Depreciation	360
Other expenses	184

Considering the 4% lost interest on his investment as an additional expense, how much did it cost Case each month to live in his own home during 1970?

35 Mr. Cummings paid cash for a set of furniture selling for $1,500, less a cash discount of 10%. He borrowed the net amount of money from a bank for 60 days at 9%. How much did he save by borrowing the money and paying cash?

36 Germain bought 80 shares of common stock for a total cost of $5,600 including brokerage and other expenses. He kept this stock for one year during which time it paid regular quarterly dividends of $2.00 per share. After receiving the dividends for a year, Germain sold the stock and received $5,350 after brokerage and other expenses had been deducted. What was Germain's net gain from owning this stock?

37 Foley receives $2.90 an hour for a regular 40-hour week with time and a half for overtime. During a busy week he worked 10 hours a day, Monday through Saturday. The following deductions were taken from Foley's pay:

$9.74 for F.I.C.A. taxes
$32.80 for Federal taxes
$6.00 for State taxes
$1.02 for Hospitalization Insurance

What net amount of money did he receive as take-home pay for the week?

FOR TEACHERS ONLY

BA

Use only *red* ink or pencil in rating Regents papers. Do not attempt to *correct* the pupil's work by making insertions or changes of any kind. Use checkmarks to indicate pupil errors.

Scores should be cumulated within parts of the examination and transferred to the cover of the answer booklet.

Part I — Mental Calculation Test

Allow a total of 20 credits, one credit for each of the following. [Allow no partial credit.]

(1) 2,465	(6) $6.49	(11) 4½″	(16) $5.40
(2) 85⅔	(7) 8,514	(12) $25	(17) $1.07
(3) April 7	(8) $25	(13) $40	(18) $2.80
(4) $2.00	(9) 20	(14) $318	(19) $9.30
(5) 60¢	(10) ⁷⁄₂₅	(15) $72	(20) $11.25

Part II

Allow a total of 40 credits, two credits for each correct answer. [Allow no partial credit.]

(1) $120	(11) November 28
(2) 40%	(12) $160
(3) $771.98	(13) $339.50
(4) $348.04	(14) $9.12
(5) $33.08	(15) $1,640.25
(6) $106.75	(16) 30%
(7) $11.06	(17) 72 days
(8) $3,100	(18) $180
(9) $48	(19) 94%
(10) $6.60	(20) ELS

[OVER]

Part III

Allow a total of 16 credits, 4 credits for each of four groups. [Allow no partial credit for any one question.]

Group 1

(21) $2.25 [2]

(22) 12 months [2]

Group 2

(23) $2,800 [2]

(24) $680 [2]

Group 3

(25) $241.98 [2]

(26) $408.95 [2]

Group 4

(27) 5% [2]

(28) $422.40 [2]

Group 5

(29) $240 [1]

(30) $600 [1]

(31) $29.60 [1]

(32) 100% [1]

Part IV

Allow a total of 24 credits, 6 credits for each of four questions. [Allow partial credit as indicated in the pamphlet entitled *Suggestions for the Rating of Regents Examination Papers in Business Subjects.*]

(33) $309.50

(34) $145

(35) $129.75

(36) $390

(37) $153.44

DO YOU KNOW ...

... that classroom teachers returned over 3,700 Regents examination evaluation forms to the Education Department last year? The comments and suggestions made by these teachers were carefully reviewed by the Department subject-matter and testing specialists and by the teachers who prepared this year's examinations.

Be sure to fill out the Evaluation Form and give it to your principal for return in the Regents box. Your comments about the Regents examinations are important! They will be taken into consideration when future examinations are prepared.