BUSINESS ARITHMETIC

Tuesday, August 25, 1936

NAME OF SCHOOL

NAME OF CANDIDATE

Fill above blanks before signal to begin work is given by examiner.

Do not open this sheet till the signal is given.

Examiner will place this sheet closed on desk of each candidate. Candidate will open the sheet and begin work at signal from examiner. Parts above the heavy line are to be worked mentally and the results placed on the sheet. Parts below the heavy line are to be worked out in full and all work shown in the spaces provided. At the end of 15 minutes work must stop and the pages used for this test must then be detached from the rest of the question paper and immediately collected.

All work must be done with pen and ink.

BUSINESS ARITHMETIC RAPID CALCULATION TEST

Tuesday, August 25, 1936 — 8.30 to 11.30 a. m.

1–2 *a* Add [4]

39680
17285
2586
974
31250
49264
6967
33860
77890
4593
84399
598
3462

---

b Find the interest on *each* of the following: [3]

$1275 for 6 days at 3 % =

600 for 80 days at 4½% =

60 for 6 months at 4% =

[Footing not required]

c Make the extensions: [3]

37½ yd @ $ .48 =

265 yd @ .60 =

108 yd @ 1.33⅓ =

[Footing not required]

d Subtract [2]

gal.	qt	pt
7	0	0
5	3	1

Show all work for *e* and *f* on this sheet in the spaces provided.

e Multiply, using the four-step method: [4]

67⅓
49⅛

---

f Divide: [Carry the decimal to *five* places.] [4]

782181)15667.1

The University of the State of New York

267TH HIGH SCHOOL EXAMINATION

BUSINESS ARITHMETIC

Tuesday, August 25, 1936 — 8.30 to 11.30 a. m., only

Write at top of first page of answer paper (*a*) names of schools where you have studied, (*b*) number of weeks and recitations a week in business arithmetic previous to entering summer high school, (*c*) number of recitations in this subject attended in summer high school of 1936.

The minimum time requirement previous to entering summer high school is five recitations a week for a school year.

For those pupils who have met the time requirement previous to entering summer high school the minimum passing mark is 65 credits; for all others 75 credits.

For admission to this examination attendance on at least 30 recitations in this subject in a registered summer high school in 1936 is required.

Answer questions 1–2 and eight of the others. Unless otherwise stated all operations except mental ones are to be shown. Practical business methods must be used in solutions.

1–2 Rapid calculation test on attached sheet. [20]

3 Answer all parts of this question. [10] [Deduct 2 credits for each incorrect answer. Answers only are required in this question.]

a At 75¢ a yard, find the total cost of 4 bolts of cloth containing 42^8, 51^1, 60^3, 45^2 yards respectively.

b The pupil registration in a certain high school increased from 844 pupils in September 1928 to 1698 pupils in September 1935. Find the average annual increase in number of pupils registered.

c An agency which charges 10% commission collected 60% of a debt of $900. How much commission did it retain?

d A box containing 50 packages of envelops made to retail at 2 packages for 15 cents cost the dealer $2.50. What was the per cent of profit based on the selling price?

e At what rate per cent must a man loan $400 so that he will receive $36 interest for a period of two years?

4 The reading of the electric meter at the residence of James Monroe is as follows:

May 1 6150 kilowatt-hours
June 1 6198 kilowatt-hours

Find the amount of Monroe's electric bill for the month if the service charge is $.75 and the rate is 5¢ a kw-hr for the first 30 kw-hrs and 3¢ a kw-hr for all remaining kilowatt-hours. [10]

5 The assessed valuation of property in a certain village is $10,769,250. The total amount needed to meet the budget for the coming year is $146,661. The estimated amount of receipts from various sources is $29,476.

a Find the tax rate per $1000. [6]

b James Leonard owns two pieces of property in this village, valued at $9600 and $8400 respectively and assessed at 80% of their value. Find the total tax that he must pay. [4]

6 During the month of May, a retail furniture company sold 18 three-piece living-room suites for $325 each. It was estimated that the total cost of each suite, including overhead and expense, was $243.75. In June, 26 of these suites were sold for $297.50 each.

a Did the company increase or decrease its monthly profit? [2]

b How much was the increase or decrease? [8]

7 A savings bank pays interest on its deposits at the rate of 2% a year and adds the interest to the balance on the first of January, April, July and October. No interest is allowed on fractional parts of a dollar. After interest was recorded on October 1, 1935, a depositor's balance was $420. On that day he withdrew $120. On April 1, 1936, he deposited $75.

a What was his balance on July 1, 1936? [8]

b What was his total interest for the nine months? [2]

8 A high school entertainment was given on two successive evenings. For each performance there were issued 250 reserved seat tickets at 35¢ each and 850 regular tickets at 25¢ each. Expenses amounted to $167. All reserved seat tickets were sold, but 42 regular tickets for the first performance and 53 regular tickets for the second performance were unsold. Find the total net proceeds for the two entertainments. [10]

9 Albert Johnson bought an automobile listed at $940 f. o. b. Detroit. Delivery costs and sales tax amounted to $105.50, license $15.50 and insurance for a year $84. During the period of ownership he used 560 gallons of gas at an average cost of 17.6 cents a gallon; oil and service charges amounted to $20.44 and garage rent to $48. He then sold the automobile for $675 and canceled his insurance policy, receiving a refund of $\frac{5}{12}$ of his annual premium. Find how much it cost Johnson to own and operate the car. [10]

[OVER]

10 L. C. Drummond bought a two-family house for $14,000, paying $8000 cash and giving a mortgage at 5½% for the remainder. He rented each apartment for $75 a month. He paid $390 for taxes and insurance for the year and allowed 3% of the cost of the house for depreciation.

a What was his net profit for the year? [8]

b What rate of profit did he realize on the cash invested? [2]

11 Verify the following invoice and determine the amount that will pay the bill today in accordance with the terms of sale: [10] [This is a test for accuracy; no partial credit will be allowed. All computations must be shown.]

Albany, N. Y., August 15, 1936

The Gibson Hardware Company
Harford, N. Y.
Bought of the
Winchester Hardware Company

Terms: 2/10 n/30

1 gro 1/2 x 10/24 RH Brass Machine Screws	@ $1.45	$1.45	$
Less 65%			.51
1 gro 1 x 6/32 RH Iron Machine Screws	@ .50	.50	
Less 70%			.15
200 sq. ft 48" 14-Mesh Opal Screening	@ .07½	15.00	
Less 7½%			13.87
3 only 3/0 Bruell Spoons	@ .60	1.80	
3 only 2 Sterling Gangs	@ .50	1.50	
		3.30	
Less 10% and 5%			2.82
			17.35