BUSINESS ARITHMETIC
Tuesday, June 18, 1935

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. All parts of this test are to be worked mentally and the results placed on the sheet. 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.

<u>**All work must be done with pen and ink.**</u>

BUSINESS ARITHMETIC RAPID CALCULATION TEST

1–2 *a* . Add   [4]

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59386
 7495
16272
  797
 8386
87664
 9470
  897
98786
 5655
89384
 7176
28795
 9673
 8389
  195
79682
 7476
 5243
```

b Compute the interest on *each* of the following: [5]

$164   for 45 days at 6% =

72   for 36 days at 5% =

123.90 for 40 days at 6% =

130 for 6 months at 3 % =

200 for one year   at $2\frac{1}{2}$% =

[Footing not required]

c Make the extensions: [5]

175 articles @   24 ¢ =

180 articles @ $7\frac{1}{2}$¢ =

243 articles @ $12\frac{1}{2}$¢ =

115 articles @ $1.10   =

400 pounds @ $28.50 per ton =

[Footing not required]

d Place answers in proper columns: [6]

Marked price	Selling price	Cost	Gain	Rate of gain on selling price	Rate of gain on cost	Rate of discount on marked price
$100	$90	$60	$30	. . . . . .	. . . . . .	. . . . . .
$ 75	$60	$48	$12	. . . . . .	. . . . . .	. . . . . .

The University of the State of New York

263D HIGH SCHOOL EXAMINATION

BUSINESS ARITHMETIC

Tuesday, June 18, 1935 — 9.15 a. m. to 12.15 p. m., only

Write at top of first page of answer paper (a) name of school where you have studied, (b) number of weeks and recitations a week in business arithmetic.

The minimum time requirement is five recitations a week for a school year.

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 A four-months note, dated December 11, 1934, was discounted 30 days later. Find the length of time for which discount was charged.

b A real-estate agent sold a house and, after deducting 5% commission, remitted $4750 to the former owner. What was the selling price of the house?

c An invoice of goods amounting to $126 was dated May 27, 1935. If the terms were $^2/_{10}$ $^n/_{30}$, what amount would be required to pay for the goods on June 6, 1935?

d What amount must be invested in Wayne Steel 5% bonds at 95 in order to produce an annual income of $600? [Disregard brokerage charges and taxes.]

e A garage is 18′ x 22′; what are the dimensions of a diagram of the garage if a scale of $\frac{1}{4}″ = 1′$ is used?

4 The Empire Sales Company has been selling refrigerators at $160, less 25%. To meet competition, the Empire Sales Company decides to allow a second discount so that the refrigerators may be sold at $110.40. Express as a rate per cent the second discount that the company must offer. [10]

5 The Monroe Savings Bank pays $2\frac{1}{2}$% interest annually on its deposits and adds the interest to the depositors' accounts on June 1 and December 1 of each year. On June 1, 1934, W. C. Jones deposited $600. He withdrew $200 on December 1, 1934. How much did Jones have on deposit on June 1, 1935? [10]

6 The building owned and occupied by the Ames Sales Company is valued at $21,000 and the stock of goods at $16,500.

a What amount of insurance must be carried on each if they are insured for 80% of their value? [2]

b What will be the average yearly cost for insurance if the rate on the building is 95¢ per $100 for three years and the annual rate on the stock is 45¢ per $100? [8]

7 A dealer bought 100 dozen men's shirts at $1.05 each, which he marked up 40% for regular sale. All were sold except 10 dozen that were soiled or of odd sizes. The dealer decided to include these shirts in a pre-inventory sale. At what price should each of the remaining shirts be marked so that the dealer's entire profit will be $33\frac{1}{3}$% on the cost of the 100 dozen? [10]

8 A dealer buys radios at $150, less 20% and 10%. For each radio that he sells, the dealer finds that he has an expense of $6 for delivery and installation.

a At what price must the dealer sell each radio in order to gain 25% on the purchase price? [4]

b At what price must the dealer sell each radio in order to gain 25% on the selling price? [4]

c Which method of fixing the selling price will give the dealer the greater profit [1]? How much greater will his profit be [1]?

9 The assessed valuation of taxable property in a certain city is $63,143,639. The total amount necessary to meet the general expenses of the city for the coming year is $1,896,191.06. The estimated amount of receipts from various sources is $736,242.41.

a Find the tax rate. [Carry the decimal to *five* places.] [6]

b What would be H. B. Grove's tax if his property is valued at $16,000 and is assessed at 70% of its value? [4]

10 H. L. Willis is the proprietor of a retail clothing store. He has the opportunity either of renting a certain building at $225 a month or of buying the building at $22,000. In case he purchases it, Willis estimates the annual expenses will be as follows: taxes $480, repairs $300, insurance $135. He considers that his money is worth 6% to him in his business. Which will be cheaper for Willis, to buy the building or to rent it [2]? How much would be saved annually [8]? [OVER]

11 During 1933, the Central Clothes Shop sold goods amounting to $37,765.80, which included a $33\frac{1}{3}\%$ mark-up on the cost; in 1934, the sales amounted to $42,489.20 with a mark-up of 25% on the cost. The expenses for 1933 were $3640 while the 1934 expenses amounted to $4186.

  a State in per cent the increase or decrease of the cost of the goods sold in 1934 as compared with the cost of those sold in 1933. [8]

  b State in per cent the increase or decrease of expenses for 1934 as compared with those of 1933. [2]

12 As briefly as possible, give a definite reason or explanation for *each* of the following practices: [10]

  a Automobile repair men are often paid on a commission basis instead of being paid a definite weekly wage.

  b Fire-insurance rates are usually higher on the contents than on the building.

  c In the division of profits in a partnership, interest on investment is sometimes allowed each partner.

  d Prices of merchandise are often listed subject to a series of discounts, such as 20%, 10%, 10%.

  e The rent of the building is often charged to the various departments of the business.