

BUSINESS ARITHMETIC

Tuesday, August 20, 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. 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.

5749

BUSINESS ARITHMETIC RAPID CALCULATION TEST

Tuesday, August 20, 1935 — 8.30 to 11.30 a. m.

1-2 a Add [4]

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4268
3710
2286
 375
9624
4461
5209
8713
 441
3288
1472
  94
4635
3913
5520
2876
    
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b Compute the interest on *each* of the following: [4]

\$630 for 60 days at 4% =

784 for 30 days at 3% =

42 for 36 days at 6% =

360 for 24 days at 4½% =

[Footing not required]

c Solve the following: [4]

.63 + .373 =

2.50 - 1.49 =

4.08 × 1.25 =

45 ÷ .05 =

[Footing not required]

d Express the following as decimals and as fractions: [2]

	<i>Decimal</i>	<i>Fraction</i>
12½%
125%

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

e Multiply, using the four-step method: [3]

$87\frac{2}{3}$
 $42\frac{1}{3}$

f Divide [3]

76.58 $\overline{)330.8256}$

550

264TH HIGH SCHOOL EXAMINATION

BUSINESS ARITHMETIC

Tuesday, August 20, 1935 — 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 1935.

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 1935 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 The taxes to be raised in a certain village amounted to \$1953.75. The tax rate was \$15.63 per \$1000. Find the assessed valuation.
- b Find the single discount that is equivalent to successive discounts of 20%, 15% and 10%.
- c If machinery costing \$7520 can be sold at the end of 4 years for \$4512, find the average annual depreciation expressed as a rate per cent.
- d Two men and four boys earn \$120. If a man earns as much as two boys, how much does one man earn?
- e A building valued at \$8000 is insured annually for 80% of its value at 75 cents per hundred. What is the amount of the premium?

4 An electric appliance company pays each of its two salesmen \$75 a month salary plus 5% commission on all his sales in excess of \$2500 in a single month. Their sales records for the past three months were as follows:

	May	June	July
R. F. Wilkins.....	\$4240	\$3852	\$2880
J. L. Sims.....	3900	4360	2475

- a Find each salesman's total income for the three months. [8]
- b Which salesman earned the greater commission? How much greater? [2]

5 On August 8, 1935, James Monty gave your father a two-months note for \$362.17, with interest at 4%. If your father has the note discounted today, how much money will he receive [8]? How much will the bank charge him for discounting the note [2]?

6 By selling an automobile for \$900 Harris lost 40% of what he paid for it, although he had owned the car only three months. He ran the car 8000 miles and spent \$94.68 for gas and oil, \$30 for garage rent and \$84 for insurance. The insurance company gave him a refund of $\frac{7}{12}$ of his premium.

- a How much did it actually cost Harris to own and operate the car during the three months? [6]
- b What was the actual cost per mile, correct to the nearest tenth of a cent? [4]

7 A dealer bought 1200 head of cattle at \$100 each. He sold 400 at \$150 each. An epidemic killed 50. At what price per head must he sell the remaining cattle in order that his total profit may be 25% on the cost of all? [10]

8 A customer bought $1\frac{1}{2}$ dozen handkerchiefs at 69¢ a dozen; $\frac{1}{2}$ dozen towels at \$5.49 a dozen; $\frac{3}{4}$ dozen washcloths at 99¢ a dozen; $\frac{1}{2}$ dozen collars at 19¢ apiece; one pair of socks at 39¢. He gave in payment a \$20 bill. How much change should he receive? [No credit unless answer is correct] [10]

9 You wish to borrow \$150. If you borrow \$150 from a bank and pay \$50 each month on the principal, the total interest and bank charges will be \$3.25. A loan company will loan \$150, charging 3% a month interest on the unpaid balance.

- a If you borrow \$150 from the loan company and pay \$50 each month on the principal, what will be the total interest cost for the three months? [In your solution show the interest to be paid each month.] [8]
- b Which concern charges the larger amount? How much larger? [2]

[OVER]

10 A man's salary is \$225 a month. His family expenses each month are as follows: rent \$60, gas and electricity \$7.50, telephone \$3.50, food $33\frac{1}{3}\%$ of his salary. Clothing and incidental expenses amount to \$550 a year. How much is he able to save annually? [10]

11 A merchant purchased an invoice of goods for \$5680 with trade discounts of 10% and 5%. The seller offered him two-months credit or a discount of 3% for immediate payment. Not having the ready cash, he accepted the credit terms.

a How much did he actually pay for the invoice of goods? [2]

b How much would he have saved if he had borrowed the money at 6% and paid cash? [8]

12 At what price should a manufacturer list an article that cost him \$141.60 so as to gain $33\frac{1}{3}\%$ on the cost, after allowing discounts of 20% and 25%? [10]