

The University of the State of New York  
254TH HIGH SCHOOL EXAMINATION  
ARITHMETIC  
Monday, June 20, 1932 — 1.15 to 4.15 p. m., only

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Fill in the following lines:

Name of school.....Name of pupil.....

Instructions

*Do not open this sheet until the signal is given.*

*Answer all questions in part I and five questions from part II.*

*Part I is to be done first and the maximum time to be allowed for this part is one and one half hours. Merely write the answer to each question in the space at the right; no work need be shown.*

If you finish part I before the signal to stop is given you may begin part II. However, it is advisable to look your work over carefully before proceeding to part II, since *no credit will be given any answer in part I which is not correct and reduced to its simplest form.*

When the signal to stop is given at the close of the one and one half hour period, work on part I must cease and this sheet of the question paper must be detached. The sheets will then be collected and you should continue with the remainder of the examination.

# ARITHMETIC

Monday, June 20, 1932

## Part I

*Answer all questions in this part. Each question has 2 credits assigned to it; no partial credit should be allowed. Each answer must be reduced to its simplest form.*

- |  |                     |
|--|---------------------|
| 1 $4.125 \times .32$   | 1..... <i>Ans.</i>  |
| 2 $4\frac{2}{3} \div 5\frac{1}{4}$   | 2..... <i>Ans.</i>  |
| 3 $53.1 \div .25$  | 3..... <i>Ans.</i>  |
| 4 $82\frac{1}{7} - 35\frac{2}{3}$  | 4..... <i>Ans.</i>  |
| 5 In a mile there are 5280 feet; find the number of feet in $\frac{7}{10}$ of a mile.                                  | 5..... <i>Ans.</i>  |
| 6 What is the difference between 8.745 and .764?   | 6..... <i>Ans.</i>  |
| 7 What per cent of a yard is 27 inches?  | 7..... <i>Ans.</i>  |
| 8 $1\frac{1}{3} \times \frac{9}{10} \times \frac{1}{3}$  | 8..... <i>Ans.</i>  |
| 9 A cement walk is 54 feet long and 6 feet wide; find its area in square feet.   | 9..... <i>Ans.</i>  |
| 10 Add .897; 5.689; .456; 8.769; .578  | 10..... <i>Ans.</i> |
| 11 Find the value of $x$ in the proportion $32 : x = 24 : 6$   | 11..... <i>Ans.</i> |
| 12 Write $87\frac{1}{2}\%$ as a common fraction.   | 12..... <i>Ans.</i> |
| 13 If 6 is 25% of the number of pupils in a class, how many are there in the class?                                    | 13..... <i>Ans.</i> |
| 14 What is the cost of a ton of salt at 80¢ per hundred pounds?  | 14..... <i>Ans.</i> |
| 15 A farmer borrowed \$3000 for 6 months at 6%; how much did he have to pay for the use of the money?                  | 15..... <i>Ans.</i> |
| 16 Lucy has saved \$15 and Margaret \$195; Margaret has saved how many times as much as Lucy?                          | 16..... <i>Ans.</i> |
| 17 Baseballs cost \$14 a dozen and retail at \$1.50 each; what is the amount of profit on a dozen balls?               | 17..... <i>Ans.</i> |
| 18 One side of a square garden is 90 feet; how many feet of woven-wire fencing will be required to inclose the garden? | 18..... <i>Ans.</i> |
| 19 Write .375 as per cent.   | 19..... <i>Ans.</i> |
| 20 What fractional part of a gallon is a pint?   | 20..... <i>Ans.</i> |
| Complete the following statements:   |                     |
| 21 To square a given number multiply the number by ....  | 21..... <i>Ans.</i> |
| 22 In one gallon there are ... cubic inches.   | 22..... <i>Ans.</i> |
| 23 $\pi$ times the diameter of a circle equals the ....  | 23..... <i>Ans.</i> |
| 24 In a promissory note, the person to whom the money is to be paid is called the ....                                 | 24..... <i>Ans.</i> |
| 25 In a number, the <i>third</i> place to the right of the decimal point is called ....                                | 25..... <i>Ans.</i> |

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# ARITHMETIC

Monday, June 20, 1932

Write at top of first page of answer paper to part II (a) name of school where you have studied, (b) grade of work completed in arithmetic.  
The minimum requirement is the completion of the work of the first half of the eighth grade in arithmetic.

## Part II

*Answer any five questions from this part. No credit will be allowed unless all necessary operations are given. Reduce each result to its simplest form and mark each answer Ans.*

26 A man bought a house for \$5500. He spent \$400 in grading the lawn and planting shrubbery. Repairs cost him \$1000. At what price must he sell the house in order to make a profit of 15% on the total cost? [10]

27 You ordered several articles at the grocery. They were delivered with the bill as shown below. The amount of the bill was not correct. Rewrite the bill, filling in your own name and making the necessary corrections. [10]

Ready Service Grocery Company

Sold to

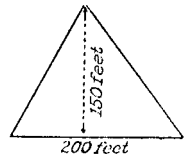
		6/20/32
5 lb onions	@ 4¢	\$ .20
$\frac{1}{2}$ peck potatoes	@ 40¢	.20
3 lb butter	@ 35¢	1.15
3 doz. eggs	@ 42¢	1.36
		\$2.91

28 The school tax in a village containing property assessed at \$3,000,000 was \$9000.

a What was the school tax rate? [5]

b What amount did a man pay whose property was assessed at \$15,000? [5]

29 A plot in the form of a triangle whose dimensions are as shown in the diagram is to be sown with grass seed. Find the cost of the grass seed at 65¢ a pound if one pound is used to each 100 square feet. [10]



30 If Sarah Smith was born July 26, 1916, what is her age in years, months and days on the date of this examination? [10]

31 Glass listed at \$1800 is needed for a new building. The Benson Company offers 55% off; the National Building Supply Company offers 30% and 25% off. What net price does each firm ask? [10]

32 Morton bought 10 dozen eggs from a farmer for \$3.80 and sold them at 48¢ a dozen. He spent 35¢ for car fare in selling them and 15¢ for boxes and paper. What was his profit [5]? What was the per cent of profit based on the selling price [5]?

33 Coal was sold to a customer at the rate of \$14.50 a ton for chestnut coal and \$14.25 a ton for egg coal. A discount of 25¢ a ton on each kind of coal was allowed for cash. The delivery was made as follows: chestnut coal 3930 pounds, 4150 pounds, 1900 pounds; egg coal 2850 pounds, 3210 pounds, 3165 pounds, 2775 pounds. What did the chestnut coal cost for cash [4]? What was the total cost of the coal for cash [6]?

34 John Smith bought 120 shares of American Automobile stock in 1929 at  $123\frac{7}{8}$ . He was forced to sell it last week at  $17\frac{1}{2}$ . How much did he lose? [Disregard brokerage.] [10]