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.

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 Find the interest on $150 for 2 months at 6%.

1................................*Ans.*

2 There are 612 pupils in a school; if $\frac{3}{4}$ of them are girls, how many boys are there?

2................................*Ans.*

3 Thomas weighed $96\frac{1}{8}$ pounds last September and now weighs $101\frac{3}{4}$ pounds. How many pounds has he gained?

3................................*Ans.*

4 At 32¢ a quart what is the cost of $2\frac{1}{2}$ gallons of syrup?

4................................*Ans.*

5 A man traveled 240 miles in 12 days; at the same rate how far will he travel in 16 days?

5................................*Ans.*

6 Write in figures: (*a*) three thousand fifty-seven and twenty-six thousandths, (*b*) four hundred eighty-six and five ninths. [Allow 1 credit for each part.]

6 (*a*)........................*Ans.*
   (*b*)........................*Ans.*

7 If the discount on $85 is $4.25, what is the rate of discount?

7................................*Ans.*

8 How many square yards of linoleum will be required to cover a hall 6 feet wide and 24 feet long?

8................................*Ans.*

9 Find the cost of 5000 pounds of coal at $14 a ton.

9................................*Ans.*

10 A road map was drawn to a scale of 8 miles to an inch. Find the distance in miles between two towns that are $6\frac{3}{4}$ inches apart on the map.

10................................*Ans.*

11 Subtract the square root of 25 from the square of 4.

11................................*Ans.*

12 Add 687; 44; 303; 9824; 789; 325; 4698

12................................*Ans.*

13 Add $2.83; $.63; $917; $25.14; $1.06; $93.75; $8.07

13................................*Ans.*

14 Divide 742665 by 385

14................................*Ans.*

15 Add $42\frac{1}{3}$; 107; $55\frac{1}{4}$; $110\frac{1}{2}$

15................................*Ans.*

16 $4\frac{1}{2} \times 3\frac{1}{6}$

16................................*Ans.*

17 Multiply 79.4 by 5.07

17................................*Ans.*

18 $17\frac{1}{2} \div 4$

18................................*Ans.*

19 $16.9 - 2\frac{3}{8}$

19................................*Ans.*

20 From the sum of 5027 and 98456 take 4527.

20................................*Ans.*

21 How many feet of wire fence will be required to inclose a circular grassplot whose diameter is 70 feet?

21................................*Ans.*

22 A foot is (*a*) what fraction of a yard, (*b*) what per cent of a yard? [Allow 1 credit for each part.]

22 (*a*)........................*Ans.*
   (*b*)........................*Ans.*

23 30 is $12\frac{1}{2}$% of what number?

23................................*Ans.*

24 Find the value of *x* in the proportion 5 : 30 : : *x* : 18

24................................*Ans.*

25 Subtract $33\frac{1}{3}$% of 120 from $\frac{1}{4}$ of 184.

25................................*Ans.*

ARITHMETIC

Tuesday, January 21, 1930

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 On October 1, 1929, John Clark bought a radio from Arthur Grant for $225. He paid $175 down and gave a note for the remainder for 90 days at 6%.

    a Write the note. [5]

    b Find the amount that Mr Clark paid Mr Grant when the note was due. [5]

27 A town raised for school purposes the sum of $21,000. The assessed valuation of the town was $3,000,000. Find the tax of a man whose property was assessed at $4800. [10]

28 *a* If you know the diameter of a circle, how do you find its area? [3]

    b If you know the length of one side of a square, how do you find its area? [2]

    c If you know the lengths of the three sides of a triangle, how do you find the perimeter? [2]

    d If you know the selling price and the commission, how do you find the rate? [3]

29 A cellar 62 feet long, 30 feet wide and 7 feet deep was excavated at a cost of 45¢ a cubic yard.

    a How many cubic feet of earth were removed? [4]

    b What was the total cost of excavation? [6]

30 On Monday, Wednesday, Thursday and Friday a boy goes to work at 8 a. m. and stops at 5 p. m. Each day he is away from work 1 hour for lunch. Tuesday morning he goes to part-time school and works from 1 to 5 p. m. Saturday he works from 9 a. m. to 12 m.

    a How many hours does he work during the week? [8]

    b Find the amount of his week's wages if he is paid 35¢ an hour. [2]

31 Mr Jones bought a new automobile for $2500. He insured it against theft for 90% of its cost at a premium of $1.35 per $100. His fire insurance cost him $25. He paid $77 for a policy covering property damage up to $1000 and liability of from $5000 to $10,000. What was the total amount Mr Jones paid for his automobile insurance? [10]

32 If a housekeeper throws away a slice of bread every day and there are 15 slices in a 12-cent loaf, how much money does she waste in a year (365 days)? [10]

33 A boy has an allowance of $1 a week. How much does he save for Christmas gifts in a year (52 weeks), if he spends 20% of his allowance for ice cream and candy and 15% for play equipment, contributes 10¢ a week at Sunday school and 25¢ a month for scout dues, pays $4.70 for his sister's birthday present, and goes to the moving pictures 21 times at 35¢ each? [10]