8. A train 22 yds. long is running at the rate of 30 miles per hour. How long will it take to pass:

(a) Λ man standing still?

(b) A man going in the same direction 5 miles per hour?

(c) A man going in the opposite direction 74 miles per hour?

Ans. (a) 15 sccs.; (b) 18 sccs.; (c) 12 secs.

9. A bin is 9 ft. long, 7 ft. wide, 3 ft. 8 in. deep. The difference in cost between filling it with hard coal and with soft coal at the same price per ton is \$7.75. Find the price of coal per ton. Ans. \$5.50.

10. A ten acre field surrounded by a fence is 40 rods long. Find the difference in cost between building a walk 3 ft. wide around the outside of the fence, and around the inside of the same fence. Lumber worth \$10 per M. Ans. 72 cts.

NORTH YORK UNIFORM PROMO-TION EXAMINATIONS.

DECEMBER 14th, 1888.

ARITHMRTIC-TO IV. CLASS.

I. Define--Reduction, perimeter, prime number, concrete number, greatest common measure, a square, a cube, mixed number. [16]

2. Which are cheaper, eggs bought at the rate of 7 for 10c. or at the rate of 12 for 17c. ? How much would be gained on 119 dozen bought at the cheaper rate and sold at the dearer? [12]

3. How much will it cost at \$1.12 the sq. yd. to pave a street 89 rods long by 78 ft. wide? [12]

4. How much would it cost at 22 cents per square yard to paint the walls of a rectangular room 27 x 13 feet, 6×11 feet, deducting two doors 7 x 4 feet, and three windows 5 feet 10 inches by 4 feet? [14]

5. How many yards of stair carpet will be required for a straight stair of twenty steps 11 inches wide, with 7 inches rise, allowing 1 yard extra at top? [12]

6. A can hoe a row of corn in 10 minutes, B in 12 minutes, C in 18 minutes, and D in 20. If they all start toge her, how many hours will it be until they all finish a row at the same moment? How many rows will each have then hoed? [12]

7. One-eleventh of a farm is worth \$19.80 more than one-twelfth of it. Find the value of two-fifths of the farm. [12]

8. Find the G. C. M. of 1628, 2882 and 4543. [10]

GROGRAPHY-TO IV. CLASS.

1. Define : Plateau, archipelago, estuary, latitude and longitude. [10]

2. Draw an outline map of N. America; enter the four principal rivers, and indicate the chief mountain ranges. [12]

3. Why is Montreal the chief city of Canada? [7]

4. Why is Toron'o the chief city of Ontario? [8]

5. Give the situation of Vancouver, Calgary, Winnipeg, Port Arthur and Three Rivers. [10]

6. How do (1) railways, (2) canals benefit a country? [16]

7. What goods are exchanged between

(1) The Dominion and the United States,

(2) The Dominion and England? [12]

8. Name the ten chief commercial centres of N. and S. America. [20]

9 Compare the east and west consts of N. America with regard to (1) form, (2) climate, (3) frade. [15]

GRAMMAR AND COMPOSITION-TO IV. CLASS.

NOTE.—Candidates may have a choice between 6 and 7, only one of which must be taken.

I. Define: Sentence, subject, predicate. Show by means of an example that in order to have a sentence we must have not only words of different kinds but also a proper arrangement of these words. [12]

2. Underline the pronouns in the following: (a) George is a careless boy, he does not read well. (b) I told you to tell William that he must not touch any of these. Show also by means of these examples the meaning of the following extract from the text book, giving special attention to the italicized clause: "Thus the pronouns are a sort of general names, or general substitutes, when circumstances make their meaning plain, for ordinary names." [12]