

# EDUCATION DEPARTMENT, ONTARIO.

DECEMBER EXAMINATIONS, 1884.

(Continued from page 34.)

## DRAWING.

10 marks for each question.

1. Illustrate and describe (a) a square, (b) its vertical diameter, (c) its left oblique diagonal.

2. Draw an upright view of a square about 1 inch to a side. Draw its diameter and bisect each semidiameter. From each of these points of division draw a straight line to the two nearest corners of the square. Join the ends of its diameters and strengthen the parts of the sides of the oblique square, not covered by the outline of the four pointed star. Strengthen the outline of the four-pointed star.

3. Draw a square 2 inches to a side. Divide it into four smaller squares. Fill each square with four pointed star overlying a square with sides oblique.

4. Draw a right line moulding about 1½ inches long and ½ inch wide, composed of concentric squares lying between the inner and outer squares.

5. Draw the top and side views of an oblong block of stone. The end of the block are ½ inch to a side and its height is 1 inch. Place the end view either above or to the right of the side view, and connect the views by dotted lines.

6. Write brief directions for drawing a square 1 inch to a side on its diameters. Illustrate, and number the lines, to show the order in which they were drawn.

## ARITHMETIC.

Examiner—J. E. Hodgson, M.A.

1. Of what number is 8967 both divisor and quotient? [3]

2. Find the greatest number that will divide 11067 and 35602, leaving as remainders respectively 17 and 21. [10]

3. Find the amount of the following bill:—12½ yds. cassimere at \$2.75 per yd.; 18½ yds. silk at \$1.17; 23¾ yds. flannel at 37½c.; 112 yds. print at 9½c.; 55 yds.

shirting at 17½c.; 37½ yds. tweed at \$1.12. [14]

4. Simplify

$$(a) 5\frac{1}{2} + 2\frac{3}{4} \div 11\frac{3}{4} \times 7\frac{1}{2} + \frac{\$18.64}{\$1.16\frac{1}{2}}$$

$$(b) \left\{ \frac{1}{2} \times \frac{1}{17} \times 0.02 \times 0.456 \right\} \div$$

$$\left\{ \frac{1}{2} \text{ of } \frac{1}{2} \right\}. [12]$$

5. The cost of carpeting a room 15 ft. long, with carpet 27 in. wide costing 90c. a yd., is \$22.50. What is the width of the room? [10]

6. A boy can do a piece of work in 43½ days, and a man can do the same in ¾ of the time. How many days will both working together require, to do five times the amount of work? [12]

7. How much water must be added to 92 gallons of brandy worth \$4.60 a gallon, in order that the mixture may be worth only \$3.60 a gallon? [12]

8. Find the simple interest on \$275.60 from 18th July, 1883, till 13th Sept., 1884, at 6% per annum. [10]

9. At what times are the hands of a clock exactly two minute space apart between four and five o'clock? [15]

## ENGLISH HISTORY.

1. Tell what you know about the reign of King John. [12]

2. Explain (as well as you can) how England is governed. [14]

3. Write brief notes on:—The Declaration of Rights, The Treaty of Union, The Abolition of Slavery, The Repeal of the Corn Laws. [16]

4. Who was Oliver Cromwell, and how did he rise to the position of Protector? [10]

5. What did the Habeas Corpus Act enact? In whose reign was it passed? [8]

6. Define:—National Exchequer, Fiscal Policy, Trial by Jury. [12]

1. A penny weighs 145½ grains, Troy; find the weight (Avoirdupois) of £1000 worth of pence.

2. How far would £1000 worth of pence reach if the coins were placed touching each