6. Compare the conditions of climate on the west side of North America; the east side of North America; and on the west side of Europe,—showing the principal causes of difference.

Or, State the principal resources of British Columbia and Newfoundland.

7. Describe the Atlantic-Coast Plain of North America lying south of New York harbor. How did the lowlands near the coast probably originates. What characteristic features mark the border line between the low plain lands and the foot-hills of the mountain region.

Or, Account for the existence of the rich marsh lands along the lower courses of many of the rivers in Nova Scotia,—showing how natural causes and the hand of man have combined in bringing them into their present state of fertility.

8. "All lakes are in process of extinction." Explain how this is brought about. State any conditions that may tend to interfere with such result.

Or, State conditions that favor the location of villages, towns and cities. Illustrate by accounting for the origin and growth of some city. Also account for the location of some village or town in your own neighborhood, or of one that you know.

ALGEBRA.—IX.

9 to 11 a. m., Thursday, 25 June, 1914.

1. (a) Divide $x^4 - 21x + 8$ by $1 - 3x + x^2$.
   (b) Find the value of $a^3 - b^3 + c^3 + 3abc$, when $a = .03$, $b = .1$, and $c = .07$.

2. Simplify $35 \left[\dfrac{3x - 4y}{5} - \dfrac{1}{10} \left\{ 3x - \dfrac{5}{7}(7x - 4y) \right\} \right] + 8(y - 2x)$.

3. Find the value of x in the equation
$$\frac{x}{2} - \frac{.05x - 7.5}{.6} = \frac{.25x + 3.8}{.3}$$

4. Solve $3x - 4 - \dfrac{4(7x - 9)}{15} = \dfrac{4}{5} \left(6 + \dfrac{x - 1}{3} \right)$.

5. The length of a room exceeds its breadth by 3 feet; if the length had been increased by 3 feet, and the breadth diminished by 2 feet the area would not have been altered. Find the dimensions of the room.

6. Solve the equations $\dfrac{y+z}{4} = \dfrac{z+x}{3} = \dfrac{x+y}{2}$,
$$x + y + z = 27$$

7. A man makes two investments, the first at 3 per cent., the second at $3\frac{1}{2}$ per cent. His total income from the two is $427. If $1400 were taken from the second investment and added to the first, the income from the two would be equal. Find the amount of each investment.

8. Find the cube root of
$$\frac{6b}{a} + \frac{6a}{b} - 7 + \frac{a^2}{b^2} - \frac{3a^2}{b^2} - \frac{3b^2}{a^2} + \frac{b^2}{a^2}$$