3, What inland seas, most of them in Asia, have no outlet to the Ocean? Where are these situated, and by what rivers are they fed?

4. In the *overland route* to India from England there is more travel by sea than by land. Trace it from Dover to Calcutta.

5. Where and what are Tangier, "The Roof of the World," Honolulu Zanzibar, Corunna, Lexington, Sobraon, Aboukir, La Hogue, Douro? Mention anything you know which makes each of these note-worthy.

ARITHMETIC.

Time allowed, 1½ *hour.*

Examiner,..... H. ASPINWALL HOWE, M.A., LL.D.

1. Find by the method of *Aliquot Parts* (PRACTICE) the value of 145 acres, 3 roods, 35 poles at £4 10s. 0d. per acre.

2. Reduce to its simplest form $\frac{2\frac{1}{8} - 1\frac{1}{8}}{7\frac{1}{2} - 6\frac{5}{8} + \frac{1}{12}}$

3. Find the *sum*, *difference*, *product* and *quotient* of 468.73 and 26.363085, taking the former for divisor.

4. The English *sovereign* weighs 123.274 grains and contains 113 grains of pure gold. The American *eagle* weighs 129 grains, of which one-tenth, is alloy. Neglecting the value of the alloy, find the value of the *eagle* in English money.

5. A wine-merchant mixes 42 gallons of spirit worth $2.10 a gallon with 30 gallons worth $3.00 a gallon. At what price must he sell the mixture to gain 25 per cent on his outlay?

ALGEBRA.

Time allowed, 1½ *hour.*

1. Write down the product of the five factors $a\,(a-1)\,(a-2)\,(a+1)\,(a+2)$ and divide the result by $a^2 - a - 2$. Shew also how the quotient may be obtained by cancelling factors common to dividend and divisor.

2. Simplify $\frac{x}{x+3} - \frac{x+3}{x} \div \frac{x}{x-3} - \frac{x-3}{x}$

3. If $s = \frac{1}{2}(a + b + c)$ shew that $a + b - c = 2(s - c)$

4. Solve the equations:—

(A) $\frac{a}{b} \frac{x}{x} - a^2 = b^2 - \frac{b}{a} \frac{x}{x}$

(B) $\left\{\begin{array}{l} \frac{x}{y} = \frac{1}{3} - \frac{1}{y} \\ \frac{y}{x} = 4 - \frac{1}{x} \end{array}\right\}$