CORRESPONDENCE

To the Editor of the *Mathematical Gazette*

DEAR SIR,

The recent growth of interest in mathematics seems to be having the effect of increasing the mathematical sophistication of the general public.

The other day at Victoria Railway Station, for example, I saw the following notice displayed by a bootblack:

$$\sin + \frac{\sin^3}{3!} + \frac{\sin^5}{5!} + \quad ?$$

Pondering the fellow's hyperbolic erudition, I made my way to the bus station, and was pleased to see that my bus had just drawn in. Boarding it, I heard a woman behind me exclaim, in a tone which suggested that the means of solving some problem or other had at that moment dawned on her:

"Get to the back of the CUBE root!"

The emphasis on the penultimate word indicated that until then she had been getting to the back of the square root. For my part, I must confess that while I am able to *extract* square, cube or other roots, the process of "getting to the back of a root" is unknown to me. The woman subsequently boarded the same bus, and I would have asked her to enlighten me, but unfortunately the bus was crowded and I was on an inside seat while she was standing up; moreover she wore a somewhat disgruntled expression.

Alighting from the bus outside the National Portrait Gallery, I was amused to see that among the usual half-dozen or so pavement artists with their coloured landscapes was one who had chalked nothing but these words:

Modern art
Gets worse and worse
So I'm resolved
To write $\tanh^{-1} Q$.

Of course I could not refrain from dropping a coin into his cap and so earning his proffered gratitude.

Yours etc., BASIL MAGER

123 *Chanctonbury Road*
Burges Hill, Sussex

To the Editor of the *Mathematical Gazette*

DEAR SIR,

Mr. H. W Clayton of Summer Fields Oxford, will, on behalf of S.A.T.I.P.S.—the Society of Assistants Teaching in Preparatory Schools—be running a Mathematics Conference in York, January 4 to 6, 1962. A similar Conference was held in Cambridge in 1960 and many valuable contacts were made. The chief aim of these Conferences is to enable Public Preparatory school mathematics masters to meet and to discuss difficulties, methods, syllabus and such things, and to help people to realize that there is something beyond Common Entrance. At Cambridge, there were about 25 masters from Public Schools and about 100

from Preparatory schools, including some Head-Masters. Many Preparatory School Masters are members of the Mathematical Association and S.A.T.I.P.S. would welcome Public School masters as Associate members of their society for an Honorary Membership Fee of 5/- a year. Expenses for Conferences are of course extra, usually about 4 guineas, for accommodation and meals. Details of Membership may be obtained from J. B. Maplin Esq., The Pound, Blatchington, Seaford, Sussex. He will of course, send further details of Conferences to members.

Yours etc., JOHN WILLIAMS

Little Thorns, Gatton Point
Redhill, Surrey

To the Editor of the *Mathematical Gazette*

DEAR SIR,

Readers of the *Gazette* may be interested to have some information about Mathematical competitions, which have gained increasing support, in recent years, in the Soviet Union and the U.S.A. Usually they have a twofold object—to detect emergent mathematical ability and to stimulate interest in the subject. The Eötvos Prize competition, which has been held annually in Hungary from 1894 to the present time (with minor exceptions) is the classic example, and it has been remarked that Hungary has produced many outstanding mathematicians, several of whom were Eötvos prizewinners. [See the articles referred to below.] The Russian Mathematical 'Olympiads' began in 1934 in Leningrad; today about ten different competitions are organised by the University centres. Some 1000 students aged 14–18 are annually involved in the Moscow Olympiad. Several Mathematical Contests are currently held in the U.S.A.—of these the best known are the Putnam competition (at undergraduate level), the Stanford University competition conducted by Prof. G. Polya, and the National High School Contest sponsored by the Mathematical Association of America. This latter contest, of which some details are given below, involves only basic algebra, geometry and trigonometry (i.e. O level with minor exceptions caused by syllabus differences). In 1960 some 150,000 students in American and Canadian High Schools took part. Further information about mathematical competitions is contained in articles in the *American Mathematical Monthly*, March 1959 and May 1960 and in *Mathematics Teacher*, December 1958.

Details of the National High School Contest

This is a multiple choice test lasting 80 minutes in which wrong answers are penalised so that random choice would produce zero score. Marking is simple and standardised. Outstanding individual performances are published and several medallions awarded. The three best papers in any participating school are totalled to give a 'team score' though the Contest is not envisaged as an inter-school competition. Coded results are published in order that participating schools may discover their relative status. The test usually consists of 40 questions, arranged in increasing order of difficulty Some specimen questions follow (1960).