

Considering these in reverse order it is seen that their sum is the coefficient of  $x^t$  in the expansion of

$$(1+x)^n \cdot (1+x)^{-(n-r-t+1)}$$

i.e. in  $(1+x)^{(r+t-1)}$

i.e.  $(r+t-1)_{(t)}$

and this establishes the identity.

In view of the widely different proofs given in the Notes it would be interesting to know how, where and by whom the identity was first established.

G. J. LIDSTONE.

[Dr. Hayden and Mr. Address say that they met the identity in question in connection with the problem of finding an interpolation formula for the symmetric part of a function.—Ed.]

### CORRESPONDENCE.

SIR,—I have always felt a little unhappy about teaching children that an unknown  $x$  is a number, because in this case it is difficult to argue that the equation

$$s = u + \frac{f}{t^2}$$

cannot be right because of the “dimensions”. A third-former, however (who has, I trust, received no indication of my unhappiness) took it upon himself, when in a recent question he was finding the weight of a cartload and a lorry load, to begin

“ Let a cartload =  $x$ ,  
 a lorry load =  $y$ ,  
 and one ton =  $t$  ”,

finally obtaining  $x = 1\frac{3}{5}t = 1$  ton 12 cwt.

This seems to me a neat way out of my difficulty and only with great regret did I dock his marks.

Yours faithfully,

CHARLES HAWES.

**1289.** We find to our Surprise, that there are several *Mathematicians* and professed *Well-wishers* to Science, who reproach the *Backwardness* of others to promote laudable and useful Science, who, though they can afford it, will not themselves be at a small Expenditure in purchasing the Books of Science published they approve; but use other Means to inspect them.—Who, not setting Example in what they so earnestly recommend, are like those pious *Inveighers* against *Vice* and *Folly* in others, who are not without their own *Offences*.—The Palladium Extraordinary, 1763, p. 96.

**1290.** A note in the accounts of King’s School, Ely, dated Lady Day 1609, states that

“ Mr. Pamplyn, the Headmaster, conceded three shillings and fourpence of his quarter stipend to Mr. Hynde, the undermaster, because Mr. Pamplyn ‘ would not teache argybra ’.”

Apparently Mr. Hynde would and did teach it! We should suppose that algebra was a subject rarely met with in English schools at this date.—*Church Quarterly Review*, Jan. 1939. [Per Rev. E. M. Radford.]