Sincere apologies to Andrew Palfreyman who has been in touch to point out some errors that have occurred at the typesetting and proofing stages in his article. He submitted two perfectly correct articles and the fault lies with the editor who put them together, hence the corrections needed on page 19.

The correct lines are shown in red below the incorrect line.

On page 18 we have:

Similarly, we obtain

$2^{16} = (2^8)^2 = 16^2 \equiv 89^2 = 7921 \equiv 72 \pmod{167}$

$2^{16} = (2^8)^2 \equiv 89^2 = 7921 \equiv 72 \pmod{167}$

[since 7921 divided by 167 is 47 remainder 72]

Also on page 18 we have:

Now from (*), we wrote that $2^{83} = 2^{64+16+2+1} = 2^{64} \times 2^{16} \times 2^2 \times 2^1$

Therefore,

$2^{83} \equiv 49 \times 72 \times 24 = 28224 \equiv 1 \pmod{167}$

$2^{83} \equiv 49 \times 72 \times 4 \times 2 = 28224 \equiv 1 \pmod{167}$

[since 28224 divided by 167 is 169 remainder 1]

On page 19 we have:

But $2^L \equiv 1 \pmod{S} \Rightarrow 2^{kL} = (2^L)^k \equiv 1^k \pmod{S} \equiv 1 \pmod{S}$ i.e. $2^L - 1$ is also divisible by S.

But $2^L \equiv 1 \pmod{S} \Rightarrow 2^{kL} = (2^L)^k \equiv 1^k \pmod{S} \equiv 1 \pmod{S}$ i.e. $2^{kL} - 1$ is also divisible by S.

Given that $2^{kL} - 1$ is divisible by S as well as $2^x - 1$ (given), (**) implies that $2^x - 1$ is as well.

Given that $2^{kL} - 1$ is divisible by S as well as $2^x - 1$ (given), (**) implies that $2^r - 1$ is as well.

However, this is what we did in the last article! We now realise why 167 was chosen in the first article and following through its argument, 167 is not only the lowest *possibility* for a prime factor of $2^{83} - 1$, it is indeed its lowest prime factor!

However, this is what we did on page 18. We now realise why 167 was chosen at the start of the article.