Prime Numbers – things long-known **and things new-found**

Internet: http://yapps-arrgh.de

Correction sheet for version 44 up to 47 (printed version)

page 58:

~~This index should actually give the result 0 for the modulus test, but it gives the value 3!~~

This index gives the value 0 but it should actually give a result > 0 for the modulus test!

It follows that $\boldsymbol{S_n = 0}$ if (and only if) n is a prime number (we start with index 0).

page 59:

…for all pseudoprimes of this sequence, the following obtains:

$\boldsymbol{F_n \equiv 0 \pmod{2} \,||\, F_n \equiv 0 \pmod{5}.}$

Legend of figures 11,12 and 13: f(n-2) instead of f(n+2)

page 100:

$$\psi(x,t) = f\left(\frac{1}{2} + ix\right)\zeta\left(\frac{1}{2} + ix\right) = e^{\frac{x^2}{2a^2}}\sum_{n=0}^{\infty} c_n(-1)^n H_{2n}\left(\frac{x}{a}\right) \tag{69}$$

page 277:

~~... coming (in place of the red '3', there should be a '0').~~
... coming (in place of the red '0', there should be a value > 0).

```
Mod[LinearRecurrence[{0,1,1},{3,0,2},{271440,271445}],{271440,271441,2
71442,271443,271444,271445}]
{173879,3,24684,27215,203586,224712}
```

```
Mod[LinearRecurrence[{0,1,1},{3,0,2},{271440,271445}],{271439,271440,2
71441,271442,271443,271444}]
{107778,199578,0,135723,3,112577}
```