

Not Always Buried Deep: A Second Course in Elementary Number Theory

Lies, Damned Lies, and Typos (Errata)

Last updated: October 25, 2009

p. 20: In Figure 3, the slope of line e_2 is a bit off; e_2 should be the reflection of e_1 about the y -axis.

p. 30: The claim that we know no even number $a > 1$ for which $a^{2^n} + 1$ is infinitely often composite is false; e.g., if $a = 8$, then

$$8^{2^n} + 1 = (2^{2^n} + 1)(2^{2^{n+1}} - 2^{2^n} + 1).$$

More generally, whenever a is a k th power for some odd $k > 1$, there is an analogous algebraic factorization. The correct claim is that no *other* such a are proved to have the stated property.

p. 223: In the sequence (7.18) of displayed equations, the left-hand side should read “ $\sum_{ab=n} \mu(a)(\sum_{d|b} \Lambda(d))^2$ ”, and not “ $\sum_{ab=n} \mu(a)(\sum_{d|b} \Lambda(b))^2$ ”.

p. 258: Five lines from the bottom. “Supposing that p^e does exactly divide m^2 ” should read “Supposing that p^e does exactly divide $\sigma(m^2)$ ”.