

CORRIGENDUM

to the paper

MACBEATH'S CURVE AND THE MODULAR GROUP

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On p. 244 of *Glasgow Math. J.* **27** (1985) on the right hand side of one of the 6 equations characterizing the 4 fixed points of the involution v a sign error has occurred. The relevant equation should read

$$y_0 y_3 y_5 y_6 = -1,$$

or the points would not lie on the curve.

Correcting the error unfortunately invalidates the model of an elliptic curve given in §6, which therefore has to be re-evaluated. First we find, in the notation of the paper,

$$2f(x) = ((r + 1)/(R + 2))^2.$$

Then $z = (r + 1)/(R + 2)$ satisfies

$$7X^4 + 4X^3 - 6X^2 - 4X + 3 = 0,$$

whence

$$49X^4 - 100X^3 + 110X^2 - 52X + 9 = 0$$

is an equation for z^2 .

This leads to the Weierstrass normal form

$$Y^2 = 4X^3 - 756X + 756$$

of the curve and to its minimal model

$$Y^2 = X^3 - X^2 - 2X + 1$$

of discriminant $\Delta = 784$ and absolute invariant $J = 28/27$.

Glasgow Math. J. **28** (1986) 241.