I

current:
$V_K(t) = (t + t^3 - t^4)(t^{\frac{1}{2}} + t^{-\frac{1}{2}})$

or?
$V_K(t) = (t + t^3 - t^4)(\sqrt{t} + \frac{1}{\sqrt{t}})$

or?
$V_K(t) = (t + t^3 - t^4)(\sqrt{t} + \frac{1}{\sqrt{t}})$

or?
$V_K(t) = (t + t^3 - t^4)(\sqrt{t} + 1/\sqrt{t})$

or?
$V_K(t) = (t + t^3 - t^4)(\sqrt{t} + \sqrt{t}^{-1})$

$V_K(e^{\frac{2\pi i}{k+2}}) = -\frac{1}{Z}\int_{\mathcal{A}} \left(\text{Tr Pexp} \oint_K A\right) e^{\frac{ik}{4\pi}CS(A)}\mathcal{D}A$

or?
$V_K(e^{2\pi i/(k+2)}) = -\frac{1}{Z}\int_{\mathcal{A}} \left(\text{Tr Pexp} \oint_K A\right) e^{(ik/4\pi)CS(A)}\mathcal{D}A$

II

$C_{ijk}\eta^{kl}C_{lmn} = C_{mjk}\eta^{kl}C_{lin}$

III

$R_{12}R_{23}R_{12} = R_{23}R_{12}R_{23}$

IV

Equations for Lorenz attractor:

$$\frac{dx}{dt} = \sigma(y - x)$$

$$\frac{dy}{dt} = x(\rho - z) - y$$

$$\frac{dz}{dt} = xy - \beta z$$

V

$\partial_t v_i + v_j \partial_j v_i$

$= -\partial_i p + \nu \partial_j \partial_j v_i$

VI

$\int_{C_1} \vec{A} \cdot d\vec{\ell} - \int_{C_2} \vec{A} \cdot d\vec{\ell} = \frac{1}{2\pi}\Phi$

or?
$\int_{C_1} \mathbf{A} \cdot \mathbf{d}\ell - \int_{C_2} \mathbf{A} \cdot \mathbf{d}\ell = \frac{1}{2\pi}\Phi$

VII

Supergravity:

$$\mathcal{L} = R - \bar{\psi}_\mu \gamma^{\mu\rho\sigma} D_\rho \psi_\sigma$$

VIII

$r_S = 2Gm/c^2$

IX

$\chi = V - E + F$

$2\pi\chi = \int_M K \; dA$

X. *Pythagoras:*

$$c^2 = a^2 + b^2$$

XI. *Babylonian Tablet*

XII. *Golden mean = partial fraction expansion:*

$$\lim_{n\to\infty} \frac{F_{n+1}}{F_n} = 1 + \frac{1}{1 + \ldots}$$

XIII. *Archimedes:*

$$v = \frac{2}{3}V$$

$$a = \frac{2}{3}A$$