Pinking Shears

Base Value: 2; Worth 6 points in the Lilac Room

"This looks like an algebra problem," you tell Dr Lucky.

"Ooh! I love algebra!" Dr Lucky exclaims. "Did you know that the multiplicative group of any field is cyclic? Let's say you have a field with 27 elements—there are fields of any prime-power size, you know, so there's a field with $3^3 = 27$ elements, and so the 26 non-zero elements make up the multiplicative group, and it's cyclic! So, let's say A is a root of $x^3 - x + 1$; then A is a generator of this cyclic group..."

At this point Dr Lucky loses you, as his absent-minded mathematical brain wanders from topic to topic, and you look back at the puzzle:

$$\zeta^2\theta + \zeta^2\xi - J\zeta^2 + P\theta + P\xi + M = 0 \tag{1}$$

$$\left(\sqrt{\alpha + \tau + \eta}\right)^4 = F \tag{2}$$

$$\beta + \iota = Q \tag{3}$$

$$\begin{pmatrix} S & C & E \\ I & G & I \\ N & W & A \end{pmatrix} \begin{pmatrix} \sigma - \kappa \\ \upsilon + \nu \\ \lambda + \gamma \end{pmatrix} = \begin{pmatrix} S \\ T \\ X \end{pmatrix} \tag{4}$$

$$\epsilon^2 + \mu^2 + \delta^2 + \zeta^2 - \epsilon\mu - \delta\zeta + \epsilon\delta + \epsilon\zeta + \mu\delta + \mu\zeta + P\epsilon + P\mu - P\delta - P\zeta + F = 0 \tag{5}$$

$$\frac{\varphi + \omega}{o + \psi} = Y \tag{6}$$

$$T\pi + U\rho + S\chi = E\theta^2 - R\xi^2 + R\theta\xi \tag{7}$$

$$\beta\theta + \alpha\iota + \beta^2 + \sigma\iota + \beta\upsilon + \lambda\iota + \beta\delta + \varphi\iota + \beta\pi + \theta\iota + \beta\alpha + \beta\iota + \beta\sigma + \upsilon\iota + \beta\lambda + \delta\iota + \beta\varphi + \pi\iota = U \tag{8}$$

$$\left(\sqrt{A\rho + A\chi}\right)^8 = R \tag{9}$$

$$\begin{aligned} \omega + A\psi + B\chi + C\varphi + D\upsilon \quad = \quad & \sqrt{\omega^2 + B\psi^2 + D\chi^2 + F\varphi^2 + H\upsilon^2 - A\omega\psi - B\omega\chi} \\ & \overline{-C\omega\varphi - D\omega\upsilon - C\psi\chi - D\psi\varphi - E\psi\upsilon - E\chi\varphi - F\chi\upsilon} \\ & \overline{-G\varphi\upsilon + V\omega + W\psi + X\chi + Y\varphi + Z\upsilon} \end{aligned} \tag{10}$$

$$\theta + \epsilon + o = T \cdot H \cdot E \cdot O \tag{11}$$

$$\sqrt[6]{\kappa^3 + \iota^3 + \lambda^3 + \lambda^3} = B \tag{12}$$

$$A(\kappa + \iota - \lambda + D\rho + L \cdot U \cdot C \cdot K \cdot Y) = \kappa + \iota + 2\lambda \tag{13}$$

$$\eta + \pi^2\theta + P\xi = -A\chi \tag{14}$$

$$(K + D + L)(P\gamma + U\zeta + Z\nu + Z\upsilon + L\alpha + E\epsilon) = (H + U + N + T - 1) \tag{15}$$

$$\alpha + Y\tau = A \tag{16}$$

$$\frac{D-\pi\theta}{\alpha\beta-J\iota}=K+D+L \tag{17}$$

$$\iota+\kappa-N=\sqrt[3]{J\iota-W\kappa+W\cdot N+\iota^3+\kappa^3-N^3} \tag{18}$$

$$P=\frac{\beta}{J-\sigma}+\frac{\alpha\beta-J\iota}{D-\pi\theta} \tag{19}$$

$$\epsilon-\zeta=A \tag{20}$$

$$\mu^7+\mu^6\nu-\mu^4\nu^3-\mu^3\nu^4+\mu\nu^6+\nu^7=E \tag{21}$$

$$\frac{V\nu+U\upsilon}{\eta\sigma\rho+N\cdot O\cdot P}=D \tag{22}$$