

All relationships below are true at all $\{t_{\mathbf{C}} : 1 \leq t_{\mathbf{C}} \lesssim 118.5\}$, unless a different domain is noted, or the equation is being evaluated at a given $t_{\mathbf{C}}$ or t_P . Assume that when \mathbf{R} or \mathbf{S} is set equal to a function of $t_{\mathbf{C}}$ that \mathbf{R} or \mathbf{S} is being evaluated at that $t_{\mathbf{C}}$; the notation has been omitted to avoid clutter.

$$\mathcal{X} \subset \mathbb{E}.$$

$$\mathbb{P} \hookrightarrow \mathbb{E}$$

$$\mathbf{X} \subset \mathbb{P}. \text{ Similarly, the codomain of } \mathbf{X}() = \wp(\mathbb{P}).$$

$$\mathbf{x} \in \mathbb{P}. \text{ Similarly, the codomain of } \mathbf{x}() = \mathbb{P}.$$

$$t_{\mathbf{C}} \in \mathbb{R}$$

$$x \neq t_{\mathbf{C}} \in \mathbb{N}. \text{ Similarly, the codomain of } x() = \mathbb{N}.$$

$$k \in [1, N_{\star}]$$

$$\mathcal{U} \equiv \mathcal{F} \cup \mathcal{T} \cup \bigcup_k \mathcal{S}_k$$

$$t_{\mathbf{C}} \gtrsim 6.99 \Rightarrow \mathcal{W} \subseteq \mathcal{F}$$

$$t_{\mathbf{C}} \gtrsim 6.9 \Rightarrow \mathcal{C}(\mathcal{U}) = \mathcal{W}$$

$$\mathbf{C} = \mathbf{C}_H \cup \mathbf{C}_S$$

$$\mathbf{C}_S = \bigcup_k \mathbf{S}_k$$

$$c_1 \in \{1,2,3\}$$

$$c_2 \in \{1,2,3\}$$

$$c_1 \neq c_2$$

$$\mathbf{S}_k = \{\mathbf{s}_k(c_1,t_{\mathbf{C}}),\mathbf{s}_k(c_2,t_{\mathbf{C}})\}$$

$$t_P \equiv \left\lfloor \frac{t_{\mathbf{C}}+2}{5} \right\rfloor$$

$$p_k(t_P) = |\mathcal{S}_k| \text{ at } t_P$$

$$p_{12}(24) < p_4(24) < p_{17}(24)$$

$$p_{44}(19)-p_{44}(18)=2350$$

$$N_r(k)|_{t_P} \propto p_k(t_P)$$

$$N_R = \sum_k N_r(k)$$

$$\mathbf{C}_H = \bigcup_k \mathbf{R}_k$$

$$\text{When defined, } \mathbf{R}_D(k) = \bigcup_{d=1}^{N_D(k)} \mathbf{r}_k(d, t_{\mathbf{C}})$$

$$N_D(11)|_{t_P=24} = 26$$

The next two statements are contrary to typical terminology, which usually uses $\mathbf{R}_{al}(k)$, not $\mathbf{R}_D(k)$, when $N_r(k) = 1$.

$$N_r(k) = 1 \Rightarrow N_D(k) = 1$$

$$N_r(k) = 1 \Rightarrow \mathbf{R}_k = \mathbf{R}_D(k)$$

$$t_{\mathbf{C}} \geq 92 \Rightarrow \mathcal{S}_k \cong \bigcup_{d=1}^{N_D(k)} \mathcal{D}_{k,d}$$

$$t_{\mathbf{C}} \geq 92 \Rightarrow N_r(k) = N_D(k)$$

$$N_r(k) = N_D(k) \Rightarrow \mathbf{R}_k = \mathbf{R}_D(k)$$

$$\mathbf{R}_k = \begin{cases} \mathbf{R}_D(k) \cup \mathbf{R}_{al}(k) \cup \mathbf{R}_{pl}(k) & 1 \leq t_{\mathbf{C}} < 92 \\ \mathbf{R}_D(k) & 92 \leq t_{\mathbf{C}} \end{cases}$$

When $t_{\mathbf{C}} < 92$, one or more of $\mathbf{R}_D(k)$, $\mathbf{R}_{al}(k)$, or $\mathbf{R}_{pl}(k)$ may be null for a given combination of k and $t_{\mathbf{C}}$. Here is a non-exhaustive list of combinations:

$$t_{\mathbf{C}} \in [1, 3) \cup [28, 92) \Rightarrow \mathbf{R}_{pl}(k) = \emptyset$$

$$(t_{\mathbf{C}} \in [49, 51)) \wedge (k \neq 2) \Rightarrow \mathbf{R}_{al}(k) = \emptyset$$

$$t_{\mathbf{C}} \in [1, 33) \cup [34, 38) \cup [51, 53) \cup [90, 92) \Rightarrow (\mathbf{R}_{al}(k) \neq \emptyset) \uparrow (\mathbf{R}_D(k) \neq \emptyset)$$

$$E_{\mathcal{U}}(t_{\mathbf{C}}) = \begin{cases} 2N_{\star} + N_R & 1 \leq t_{\mathbf{C}} \lesssim 87.1 \\ 2(N_{\star} + 1) + N_R + \min N_r(k) & 87.1 \lesssim t_{\mathbf{C}} \end{cases}$$

$$\mathcal{S}_{10}|_{t_{\mathbf{C}}=33} \cong (\mathcal{S}_{10} \cup \mathcal{S}_{35})|_{t_{\mathbf{C}}=118}$$

$$\mathcal{S}_{49} \in \mathcal{U} \Rightarrow \iint \mathcal{S}_{49} > \iint \mathcal{S}_k \ \forall k \neq 49$$

$$\text{When defined, } \mathbf{r}_k(d, t_{\mathbf{C}}) = \mathbf{o}(\mathcal{D}_{k,d}, t_{\mathbf{C}}).$$

$$\text{Let } \mathbf{O}_{\mathcal{X}} \text{ be the image of } \mathbf{o}(\mathcal{X}, t_{\mathbf{C}}).$$

If $\mathbf{x}_n = \mathbf{o}(\mathcal{X}, t) : t \in \mathbb{R}$, let $\mathbf{x}_1 = \mathbf{o}(\mathcal{X}, t_1)$, where t_1 is the smallest t such that $\mathbf{o}(\mathcal{X}, t) \neq \emptyset$. Then let $\mathbf{x}_{i+1} = \mathbf{o}(\mathcal{X}, t_{i+1})$, where t_{i+1} is the smallest $t > t_i$ such that $\mathbf{o}(\mathcal{X}, t_{i+1}) \neq \emptyset$ and $\mathbf{o}(\mathcal{X}, t_{i+1}) \neq \mathbf{o}(\mathcal{X}, t_i)$.

$$\mathbf{p}_n = \mathbf{o}(\mathcal{U}, t_{\mathbf{C}})$$

$$\mathbf{P}=\bigcup_n \mathbf{p}_n$$

$$\mathbf{p}_{44}=\mathbf{s}_{21}(3,109)$$

$$\mathbf{v}_n=\mathbf{o}'(\mathcal{U},t_{\mathbf{C}})$$

$$\mathbf{p}_{37}=\mathbf{v}_{36}$$

$$E:(\mathbf{x},t_{\mathbf{C}})\rightarrow \mathbb{N}_0\leq E_{\mathcal{U}}(t_{\mathbf{C}})$$

$$E(\mathbf{p}_8,25)=170$$

$$E_{\mathcal{U}}(107)-(E(\mathbf{p}_{43},107)+E(\mathbf{v}_{45},107))=1$$

$$a(\mathbf{p}_2)=a(\mathbf{p}_6)=38$$

$$a(\mathbf{p}_{33})+1=a(\mathbf{p}_{45})$$

$$a(\mathcal{S}_{13})|_{t_{\mathbf{C}}=118}=109$$

$$\mathbf{g}_n^k=\mathbf{o}(\mathcal{S}_k,t_{\mathbf{C}})$$

$$\mathbf{p}_{11}=\mathbf{g}_9^{16}$$

$$E(\mathbf{g}_{65}^6,101)=111$$

$$\mathbf{j}_7=\mathbf{g}_1^7$$

$$\mathcal{G}\subset \mathcal{S}_{11}$$

$$1\leq t_{\mathbf{C}}\lesssim 1.9\Rightarrow \mathcal{C}(\mathcal{U})=\mathcal{G}$$

$$\bigcup_{d=5}^{15} \mathcal{D}_{11,d} \subset \mathcal{G} : t_P=24$$

$$\mathbf{m}_n^{\mathcal{G}}=\mathbf{o}(\mathcal{G},t_{\mathcal{G}})$$

$$\mathbf{m}_2^{\mathcal{G}}=\mathbf{m}_5^{\mathcal{G}}=\mathbf{m}_{11}^{\mathcal{G}}$$

$$a(\mathbf{m}_{88}^{\mathcal{G}})=60$$

$$\alpha=\alpha_1+\alpha_2: (\mathbf{p}_{\alpha_1}=\mathbf{p}_{\alpha_2})\wedge (\alpha_1\neq \alpha_2)$$

$$a(\mathcal{S}_{13})|_{t_{\mathbf{C}}=115}=\beta$$

$$\sum_{t_{\mathbf{C}}} E(\mathbf{p}_{13},t_{\mathbf{C}})=\gamma$$

$$\mathbf{v}_{45}=\mathbf{r}_{16}(4,95)=\mathbf{r}_{16}(6,98)=\mathbf{s}_{16}(\delta,99)$$

$$\mathbf{m}_{\epsilon-1}^{\mathcal{G}}=\mathbf{m}_{\epsilon+1}^{\mathcal{G}}\in \mathbf{R}_{pl}(11)|_{t_{\mathbf{C}}=27}$$

$$a(\mathbf{y}) = \zeta : \exists ! \mathbf{y} \in \mathbf{R}_{al}(5)|_{t_{\mathbf{C}}=87}$$

$$\mathcal{G} \subset \left(\bigcup_{d=5}^{16} \mathcal{D}_{11,d}\right) \cup \mathcal{D}_{11,\eta} : t_{\mathbf{C}} = 118$$

$\theta = \theta_1 + \theta_2$. Let $p_{\theta_1}(\theta_2) = b$ such that b is the largest value of $p_k(t_P)$ over all k and t_P such that $(b-1)! \equiv -1 \bmod b$.

$$\mathbf{g}_6^{\iota} = \mathbf{g}_7^{\kappa} : \iota \neq \kappa$$

$$p_4(9)-p_{26}(9)=\lambda$$

$$N_r(1)|_{t_P=\mu}\neq 1$$

$$a(\mathbf{z}) = \nu : \exists ! \mathbf{z} \in \mathbf{R}_{28} \cap \mathbf{R}_{47} \ \forall t_{\mathbf{C}}$$

$$\exists ! \mathbf{p}_{\xi} \in \mathbf{j}$$

$$\pi = \pi_1 + \pi_2 + \pi_3 + \pi_4 : (\mathcal{S}_{\pi_1} \cap \mathcal{S}_{\pi_2} \cap \mathcal{S}_{\pi_3} \cap \mathcal{S}_{\pi_4} \neq \emptyset) \wedge (\pi_1 \neq \pi_2 \neq \pi_3 \neq \pi_4)$$

$$\mathcal{W}|_{t_{\mathbf{C}}=118} \subset (\mathcal{S}_{\rho})|_{t_{\mathbf{C}}=1}$$

$$\mathcal{W}|_{t_{\mathbf{C}}=26} \subset (\mathcal{S}_{\rho} \cup \mathcal{S}_{\sigma})|_{t_{\mathbf{C}}=1} : \rho \neq \sigma$$

$$\mathcal{U} \Rightarrow \iint \mathcal{S}_{14} < \iint \mathcal{S}_{\tau} < \iint \mathcal{S}_{50} : t_{\mathbf{C}} = 118$$

$$v = a(\mathcal{C}(\mathcal{U})) : 1.9 \lesssim t_{\mathbf{C}} \lesssim 6.9$$

$$\text{centroid} \bigcup_k \mathcal{S}_k \in \mathcal{S}_{\phi} : t_{\mathbf{C}} \gtrsim 86.4$$

$$\chi = \max N_r(k) \ \forall t_P$$

$$\psi = \min z : (z = a(\mathcal{S}_k)) \wedge (z = a(\mathbf{p}_n))$$

$$\exists ! \mathcal{S}_{\omega} : (\mathcal{S}_{\omega} \cap \mathcal{S}_k) \neq \emptyset \text{ for exactly one } k \neq \omega$$

$$(v-\tau)\left[\left(\frac{\pi^{\eta}}{\alpha+\gamma+\theta}-\frac{(\lambda-\phi)!}{\nu}\right)(\beta-\psi)-\frac{\xi^{\rho/\mu}+\sigma-\zeta}{\delta}-(\epsilon-\chi)^{\kappa-\omega}-\iota\right]$$

Checksums:

$$(\alpha \cdot \beta \cdot \gamma) \bmod 13 \equiv 12$$

$$(\delta \cdot \epsilon \cdot \zeta) \bmod 13 \equiv 11$$

$$(\eta \cdot \theta \cdot \iota) \bmod 13 \equiv 3$$

$$(\kappa \cdot \lambda \cdot \mu) \bmod 13 \equiv 1$$

$$(\nu \cdot \xi \cdot \pi) \bmod 13 \equiv 11$$

$$(\rho \cdot \sigma \cdot \tau) \bmod 13 \equiv 4$$

$$(v \cdot \phi \cdot \chi) \bmod 13 \equiv 10$$

$$(\psi \cdot \omega) \bmod 13 \equiv 2$$