

$$> \# \frac{3^n - 1}{3 - 1} = \text{Prime by } H \cdot E :$$

$$> \text{for } h \text{ from } 1 \text{ to } 11 \text{ do } H := \frac{2^h - 1}{2 - 1} : S := \frac{2^H - 1}{2 - 1} \text{:if } \text{isprime}(S) \text{ then print} \left(\frac{[2]^{[2]^h - 1}}{[2]^{[2] - 1}} - 1 = \left(\frac{2^H - 1}{2 - 1} \right) [\text{prime}(Hiro \cdot Ebi)] \right) \text{fi od:}$$

$$\frac{[2]^{[2]^2 - 1}}{[2]^{[2] - 1}} - 1 = 7_{\text{prime}(Hiro \cdot Ebi)}$$

$$\frac{[2]^{[2]^3 - 1}}{[2]^{[2] - 1}} - 1 = 127_{\text{prime}(Hiro \cdot Ebi)}$$

$$\frac{[2]^{[2]^5 - 1}}{[2]^{[2] - 1}} - 1 = 2147483647_{\text{prime}(Hiro \cdot Ebi)}$$

$$\frac{[2]^{[2]^7 - 1}}{[2]^{[2] - 1}} - 1 = 170141183460469231731687303715884105727_{\text{prime}(Hiro \cdot Ebi)} \quad (1)$$

$$> \text{for } e \text{ from } 2 \text{ to } 10 \text{ do for } h \text{ from } 1 \text{ to } 10 \text{ do } H := \frac{e^h - 1}{e - 1} \text{:if } \text{isprime} \left(\frac{e^H - 1}{e - 1} \right)$$

$$\text{then print} \left(\frac{[e]^{[e]^h - 1}}{[e]^{[e] - 1}} - 1 = \left(\frac{e^H - 1}{e - 1} \right) [\text{prime}(Hiro \cdot Ebi)] \right) \text{fi od:od:}$$

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$$\frac{[3]^{[3]^3 - 1}}{[3]^{[3] - 1}} - 1 = 797161_{\text{prime}(Hiro \cdot Ebi)}$$

$$\frac{[6]^{[6]^2 - 1}}{[6]^{[6] - 1}} - 1 = 55987_{\text{prime}(Hiro \cdot Ebi)} \quad (2)$$