

Congruentia infinita

$$x^5 - 20x^4 - 86x^3 - 98xx + 80x + 3 \equiv 0 \pmod{241^\infty}$$

habet radices

- (1) = 2 + 191.r +
- (2) = 3 +
- (3) = 4 +
- (4) = 5 +
- (5) = 6 +

a, b, c in A, B, C
per subst

$$\mu \frac{2\mu(b-b)}{a'} \frac{2\mu(b-b)}{a} \begin{matrix} 7 & 10 & 1 \\ 5 & 0 & 4 & 7 \\ 1 & 6 & 1 \end{matrix}$$

$$\sqrt[3]{1} = 1 \dots$$

$$\begin{matrix} 7 & 10 & 1 \\ 8 & 9 & 1 & 10 \\ 5 & 0 & 4 & 7 \\ 5 & 9 & 3 & 5 & 9 & 1 \\ 0 & 10 & 8 & \end{matrix}$$

4.1

$$\begin{matrix} 6 & 0 & 4 & 0 & 2 & 1 \\ 0 & 10 & 0 & 2 & 0 & 0 \\ 5 & 1 & 3 & 9 & 2 & 1 \\ 9 & 0 & 4 & 10 & 4 & 4 \end{matrix} \cdot 10 \cdot 0 \cdot 2 \cdot 0 \cdot 0$$

$$\begin{matrix} 256 & 2 & 8 & 16 & 5 & 128 \\ 3 & 0 & 8 \\ 8 & 2 & 8 \\ 1 + \frac{20}{x} & 5 & 8 \\ 1 + \frac{20}{x} + \frac{40k}{x^2} = 4 & 3 & 5 & 1 & 9 & 1 \\ & 8 & 7 & 1 & 0 & 1 \\ & 7 & 1 & 9 \\ & 5 & 9 & 0 & 0 & 1 \\ & 9 & 1 \\ & 5 \end{matrix}$$

$$P=0$$

$$\left(\left(\frac{dP}{dx} \right)^2 + \left(\frac{dP}{dy} \right)^2 \right)^{\frac{1}{2}}$$

$$\frac{dP}{dx} \frac{d^2P}{dy^2} - \frac{d^2P}{dx^2} \frac{dP}{dy} = \frac{d^2P}{dx^2} \frac{dP}{dy} \frac{d^2P}{dy^2} +$$

$$\begin{matrix} 1 & 1 & -1 \\ 0 & 0 & 0 \end{matrix} \text{ in } \begin{matrix} 1 & 0 & 0 \\ -1 & 0 & 0 \end{matrix} \text{ per}$$

vice versa per

$$\begin{aligned} \sqrt{5} \pmod{11^\infty} &= 9 \cdot 0 \cdot 4 \cdot 10 \cdot 4 \cdot 4 \\ a &= 10 \cdot 0 \cdot 2 \cdot 5 \cdot 2 \cdot 7 \\ b &= 0 \cdot 10 \cdot 8 \cdot 5 \cdot 9 \cdot 3 \\ &2 \cdot 8 \cdot 8 \cdot 7 \cdot 10 \cdot 1 \\ &6 \cdot 4 \cdot 5 \cdot 5 \cdot 6 \cdot 4 \\ &9 \cdot 6 \cdot 7 \cdot 9 \cdot 7 \cdot 3 \end{aligned}$$

$$\begin{aligned} \xi + \xi^4 &= a \\ \xi^2 + \xi^3 &= b \\ a+b &= -1 \\ ab &= -1 \\ a+b &= \\ \text{Vs mod. 11} &= 4, \\ 1 \cdot 1 &= 1 \\ 1 \cdot 0 &= 1 \\ 0 \cdot 1 &= 1 \\ 10 &10 &10 &10 &10 &10 \\ 4 &4 &11 &5 &5 &5 \\ 10 &10 &10 &10 &10 &10 \\ (\xi - \xi^4)^2 &= \xi^2 + \xi^3 - 2 \\ &= 3 \end{aligned}$$