

Martin dinars

E.A.R.	E.A.R.E.
exp. $\mathbb{Z}$	exp. $\mathbb{Z}_0$
	- Polinomio.
E.A.R.	E.A.R.
exp. $\mathbb{Z}$	exp. $\mathbb{Z}$

E.A. exp es una fracción

$$\sqrt[5]{\frac{x^5 y^5 + x^5 z^5 + y^5 z^5}{x^5 + y^5 + z^5}}$$

$$m.c.m(x,y,z) = \underline{xyz}$$

⑥  $\frac{x}{x+1} - x$   
 $\rightarrow \frac{x^{x+1} + x}{x(x+1)}$   
 $\frac{1}{x} - x$   
 E.A.R.f.

⑦  $E(x,y,z) = n \cdot x \cdot y^{n-2} + 3xz + x \cdot yz$

$\checkmark n-2 \geq 0 \rightarrow n \geq 2$   
 $\checkmark n \geq 0 \rightarrow 5-n \geq 0 \rightarrow 5 \geq n$   
 $n = \{2; 3; 4; 5\}$

⑧  $t_1 = (2a+b)x \cdot y^7 =$   
 $t_2 = (3a-b)x^2 \cdot y^{2a+1}$   
 $a=3$   
 $b=1$

$\circ \circ 7+8 = \underline{15}$

$$x \cdot y^2$$

$$3 \cdot x^{m-2} \cdot y^{n+5}; 7x^{n+5} \cdot y^{m+4}$$

$$\checkmark m-2 = n+5 \Rightarrow m = n+7$$

$$\checkmark n^2 + 5 = m + 4$$

$$\Rightarrow n^2 - n - 6 = 0$$

$$(n-3)(n+2) = 0$$

$$n = 3$$

$$m = 10$$

$$\underline{13}$$

(10)

$$\left( \frac{2^2 + 3(2^3) + 5(2^4) + 10(2^1)}{4^0 + 28(4^{-1})} \right)^{-1}$$

$$(x=1)$$

 $\Rightarrow$ 

$$\left( \frac{4 + 24 + 80 + 20}{1 + 7} \right)^{-1} = \frac{1}{16}$$

$$x^{-5}$$

$$x^6 = \sqrt{2} \sqrt{2}^6$$

$$\Rightarrow x^6 = \sqrt{2} \cdot 3 \cdot 2 \sqrt{2}$$

$$2 \sqrt{2}$$

$$\frac{(x^6)}{(x^6)} = \frac{\sqrt{2}^3}{\sqrt{8}}$$

$$\Rightarrow x^6 = \sqrt{8}$$



$$x^x = 3$$

$$(x^{x^x})^x = (x^x)^x$$

$$3^3 = 27$$

$$x^{x^2} = 2$$

$$\Rightarrow \frac{1}{x}^{\frac{1}{x}} = 2 \Rightarrow \frac{1}{x} = \sqrt{2}$$

$$\Rightarrow x = \frac{1}{\sqrt{2}} = \frac{\sqrt{2}}{2}$$

Prop

$$x^{x \dots x} = n \Rightarrow x = \sqrt[n]{n}$$

$$x^{x^3} = 3 \Rightarrow x = \sqrt[3]{3}$$

$$\frac{1}{2}^{\frac{1}{2}} = x \Rightarrow \frac{1}{2} = \sqrt{x}$$

$$\sqrt[14]{\sqrt[2]{x\sqrt{2}}} = 2^{\sqrt{2}}$$

$$\frac{1}{x \cdot \sqrt{2} \dots}$$

$$\frac{1}{x} = 2$$

$$x = \frac{1}{2}$$

$$(x^x)^3 = (36)^3$$

$$(x^3)^{(x^3)} = (6^2)^3 = 6^6$$

$$\Rightarrow x^3 = 6 \Rightarrow x = \sqrt[3]{6}$$

TOSCANS

$$(16) \quad 4^{x+2} - 5(4^x) = 99$$

$$4^x (4^2 - 5) = 99$$

$$(4^x)^2 = (9)^2$$

$$T = \sqrt{(16)^x - 56}$$

$$\sqrt{81 - 56} = 5$$

$$(17) \quad a^b = 2, \quad b^a = 3$$

$$\circ a^b + b^a$$

$$2^3 + 3^2 = 17$$

$$(18) \quad (25)^{5^{x+2}} = \sqrt[5]{2 \cdot 5^{12-x}}$$

$$\Rightarrow 5 \cdot 5^{x+2} = \frac{5^{12-x}}{5^x}$$

$$\Rightarrow 5^{x+3} = 5^{12-2x}$$

$$x+3 = 12-2x \Rightarrow x = 3$$

$$(19) \quad E = OP \left\{ \frac{\sqrt[3]{2} \sqrt[4]{12} \sqrt[5]{12} \dots + \sqrt[3]{17} \sqrt[4]{17} \sqrt[5]{17} \dots}{\sqrt[4]{11} + \sqrt[4]{20} + \sqrt[4]{20} + \sqrt[4]{20} \dots} \right\}$$

$$OP \left| \frac{3 + 17}{\sqrt[4]{11+5}} \right| \Rightarrow -10$$

$$\ln |2^4| \Rightarrow \frac{4}{2}$$



$$P(x) = (6x^4 + 3)(x^2 + 5x + 1)(x^3 - 8x^4)$$

$$6 + 10 + 3 = 19$$

$$P(x, y) = x \cdot y^{a+2b+c} + x \cdot y^{a+b+2c} + x \cdot y^{a+2c}$$

$$a+2b+c = a+b+2c \Rightarrow b=c \Rightarrow c=1$$

$$a+b+2c = 2a-2b+2c \Rightarrow 3b=a \Rightarrow a=3$$

$$a+2b+c=6$$

$$3b+2b+b=6 \Rightarrow 6b=6 \Rightarrow b=1$$

$$a+b+c=5$$

$$P(x) = (a^4 - 16)x^8 + (b^3 - 63)x^2 + 2x + 5$$

Mónico: Coef. Principal = 1

$$a^4 - 16 = 0 \Rightarrow a = 2$$

$$b^3 - 63 = 1 \Rightarrow b = 4$$

$$6$$

$$P(x) = 3x + 2$$

$$P(g(x)) = 3x^2 - x + 2$$

$$3g(x) + 2 = 3x^2 - x + 2$$

TOSCANO

x+5

$$3(g(3)) = 3 \cdot (3)^2 - 3$$

$$g(3) = \underline{8}$$

\* Prop

$$P(x) = ax + b$$

$$\underbrace{P(P(P \dots (P(x))))}_{\text{"n" Veces}} = ax + b \left( \frac{a^n - 1}{a - 1} \right)$$

$$(29) P(x) = ax + b$$

$$\underbrace{P(P(P(x)))}_{3} = \underbrace{8x + 189}_{2^3}$$

$$a = 2$$

$$n = 3$$

$$b \cdot \left( \frac{2^3 - 1}{2 - 1} \right) = 189$$

$$b = 27$$

$$P(x) = 2x + 27$$

$$P(3) = 6 + 27 = \underline{33}$$

(27)

$$g(p) = 5 - p = x^5$$

$$g(q) = 3 - q = x^3$$

$$g(R) = 6 - R = x^6$$

$$\sqrt[3]{(p^3 + q^3)R \div 4q}$$

$$\sqrt[3]{(x^5 + x^3) \cdot x^6 \div 4x^3}$$

$$\frac{5 + 6 - 3}{3} = \underline{6}$$