

01

$$\overline{abab}_{(n)} = 221$$
$$(n^2+1)\overline{ab}_{(n)} = 17(13)$$
$$\boxed{a=3} \quad \boxed{n=4}$$
$$\boxed{b=1} \quad \overline{ab}_{(4)} = 13 = 31_{(4)}$$

$$a+b+n = 8$$

$$x^1 \leq 8 < x^2$$

$$x = \underline{3, 4, 5, 6, 7, 8}$$

8 6

01

$\frac{1}{5} +$



(01)

$$\frac{1}{5} + \frac{0}{5^2} + \frac{3}{5^3} + \frac{1}{5^4} + \frac{0}{5^5} + \frac{3}{5^6} + \dots$$

$$E = 0.103_{(5)}$$

$$E = \frac{103_{(5)}}{444_{(5)}} = \frac{28}{124} = \frac{7}{31}$$

(0.7)₍₃₁₎

$$B = \frac{1}{5} + \frac{0}{5^2} + \frac{3}{5^3} + \frac{1}{5^4} + \frac{0}{5^5} + \frac{3}{5^6} + \dots$$

$$- \frac{28}{124} = \frac{7}{31}$$

(0.7)₍₃₁₎

01

$$\times \left(\frac{1}{7} + \frac{2}{7^2} + \frac{1}{7^3} + \frac{2}{7^4} + \dots \right)$$

$$S = \frac{9}{48}$$

$$S = \frac{3}{16}$$

ak

(4)

$$a = 2$$

$$b =$$

$\boxed{03}$ $\left. \begin{matrix} 17 \\ 17 \\ 17 \\ \vdots \\ 17 \end{matrix} \right\} 100 \text{ VERE}$ $=$ $\begin{matrix} 10 \\ 20 \\ 30 \\ \vdots \\ (n-1)0 \\ (n) \end{matrix}$ (20)
 $6! = 720 = n!$
 $n = 6$

$\textcircled{05}$ $\sum_{n=0}^{\infty} \frac{2^n + 3^n}{5^n}$
 15 $\frac{5}{2} + \frac{5}{3}$ 10
 6
 $\int = \frac{25}{6}$

$$\begin{array}{r} 2^n + 3^n \\ \hline 5^n \end{array}$$

10

$$\begin{array}{r} 5 \\ \hline 5 \end{array}$$

Ob

$$S = \frac{1}{5^1} + \frac{2}{5^2} + \frac{3}{5^3} + \frac{4}{5^4} + \dots$$

$$5J = 1 + \frac{2}{5} + \frac{3}{5^2} + \frac{4}{5^3} + \dots$$

$$S = \frac{1}{5} + \frac{2}{5^2} + \frac{3}{5^3} + \dots$$

$$45 = 1 + \frac{1}{5} + \frac{1}{5^2} + \frac{1}{5^3} + \dots$$

$$S_L = \frac{t_1}{1-r}$$

$$\frac{1}{1 - \frac{1}{5}} = \frac{1}{\frac{4}{5}}$$

$$\Delta = \frac{5}{4}$$

20

$$1 + 2 + 3 + 4 + \dots$$

$$J = \frac{15}{5}$$

$$S = \frac{1}{7} + \frac{2}{7^2} + \frac{3}{7^3} + \frac{4}{7^4} + \dots$$

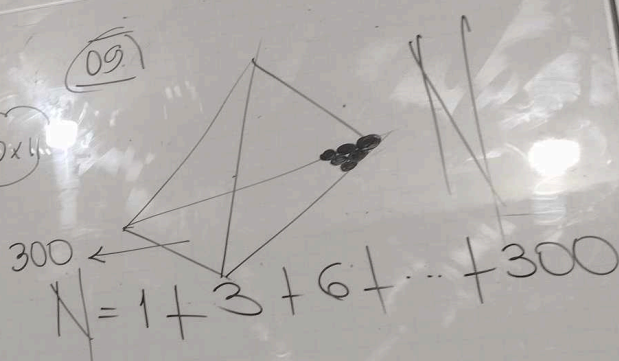
$$S = 2 + 6 + 12 + \dots + 110$$

$$S = 1 \times 2 + 2 \times 3 + 3 \times 4 + \dots + 10 \times 11$$

$$S = \frac{10 \times 11 \times 12}{3}$$

$$S = 440$$

(09)



$$N = \frac{1 \times 2}{2}$$

$$N = \frac{24}{2}$$

$$N =$$

$$+ \dots + 300$$

$$N = \frac{1 \times 2}{2} + \frac{2 \times 3}{2} + \frac{3 \times 4}{2} + \dots + \frac{24 \times 25}{2}$$

$$N = \frac{24 \times 25 \times 26}{2}$$

$$N = 2600$$

(12)

$$CA(a, b, c) = \frac{7(b+1)(4a+1)}{2}$$

$$a=2$$

$$9-b=b+1$$

$$0+6+1=6$$

$$b=4$$

$$11=0$$

HALLORE EL EXPONENTE
DE 7 EN 200!

$$\begin{array}{r} 200 \div 7 \\ \underline{28 \div 7} \\ 4 \end{array}$$

Suma: 32

(22) 31! TIENE η DIVIS

$$\begin{array}{r} 31 \div 2 \\ \underline{15 \div 2} \\ 7 \end{array}$$

Suma: 26

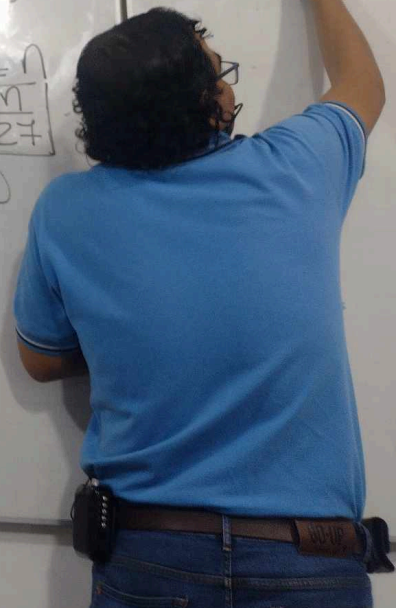
$$\begin{array}{r} 26 \\ 2 \end{array}$$

$\#D = 27$ $K = 1$
 $K = \frac{\eta}{27}$

$$32! = (32 \cdot 31!) = 2^5 \cdot 2^{26}$$

$\#D = 32$ $K = \frac{32 \cdot 1}{27}$

(25)



Divis

26
 $2 \cdot 26$
 $\#D = 2 \neq K = 1$
 $K = \frac{1}{27}$
 $2 \cdot 26$
 $2 \cdot 26$
 $2 \cdot 26$

(25) $\frac{10(80)}{100} = 8$

~~100~~ $(80+x) = 8$

$80+x=200$

$x=120$

(28) $40\% = \frac{40}{100} = \frac{2}{5}$

R $2(7x)$

NR $5(7x)$

D $2(2x)$

ND $5(2x)$
 $10x$
 $10(2) = 20$

$35x+4x=48$

$39x=48$

$x=2$

(29)

TOSTAR

5kg

4kg

$$\frac{115}{100} (5x) = 4 \left(\frac{115}{10} \right)$$
$$\therefore x = 8$$

PERDE 20%

$$\frac{80}{100} = \frac{4}{5}$$

(30)

$$\frac{90}{100} \times \frac{20}{100} \times 2$$

$$L = 25$$

$$L = 30$$

5/100

kg
 $\frac{115}{10}$
 PIERDE 20%
 \downarrow
 $\frac{80}{100} = 4$
 $\frac{30}{100} \times 2 = 2$
 $\frac{25}{100} \times 2 = 2$
 $L = 25$
 $G_N = G_B - \text{gastos}$

$L = 30$
 $\frac{32}{100}$
 $P_F = 150$
 $G = 5$
 $\text{Dot} \downarrow$
 $\frac{30(150)}{100} = 45$
 $\frac{2}{150}$
 $\frac{1}{75}$
 $G_N = G_B - \text{gastos}$
 $2 = 5 - 3$

(33)

$$\begin{array}{ccc} P_F = 100 + a \\ \hline P_c & G & Dst \\ 100 & a-25 & 25 \end{array}$$

$$a-25 = \frac{1}{100}(a+75)$$

$$5a-125 = a+75$$

$$\boxed{a=50}$$

(14)

$$N = 2^a \cdot 3^a \cdot 5^a$$

$$2 \left(2^{a-1} \cdot 3^a \cdot 5^a \right)$$

$$2 \left(\frac{2^a}{2-1} \cdot \frac{3^{a+1}}{3-1} \cdot \frac{5^{a+1}}{5-1} \right) =$$

$$(2^a-1)(3^{a+1}-1)(5^{a+1}-1) = 3(26)$$

$$\boxed{a=2}$$

$$N = 2^2 \cdot 3^2 \cdot 5^2$$

$$\#D_c = \#D - \#D_b$$

$$\#D_c = 3(3)(3) - 4$$

$$\boxed{23}$$

$$2418$$

$$(124)$$

$$2^2 \cdot 3^2 \cdot 5^2$$

$$3(3)(3) - 4$$

$$23$$

$$\frac{120}{100}$$

$$(45) \quad \frac{7+x}{350} = \frac{1}{5} \quad (42)$$

$$7+x=70$$

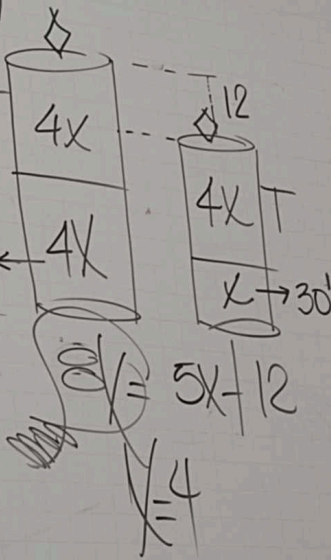
$$x=63$$

$$2_H = T$$

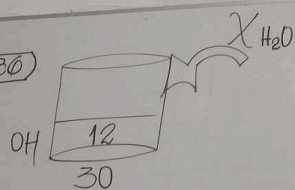
$$2_H = 120'$$

$$4H$$

$$32$$

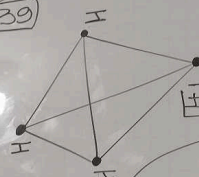


(30)



$$\frac{25}{100} (30 + X) = 12$$
$$30 + X = 48$$
$$\therefore X = 18$$

(39)



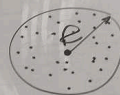
$$\frac{8,4 \text{ min}}{8+1} = \frac{X}{1}$$
$$7X = 8,4$$

$$N_{LR} = \frac{I-2}{8}$$

$$I=4 \quad N_{LR} = \frac{4-2}{2} = 1$$

$$X = 1,2 \text{ min} \times 60$$
$$X = 72 \text{ seg}$$

(40)



$$\frac{2}{\pi(3)^2} = \frac{X}{\pi(9)^2}$$
$$2(81) = 9X$$
$$18 = X$$

(41)

$$\begin{array}{l} C=2 \\ A=1 \end{array} \quad \frac{\cancel{M} \cdot \cancel{5}}{\underbrace{3A+1C}_{\cancel{5}}} = \frac{\cancel{M} \cdot T}{\underbrace{5A+2C}_9}$$

$$\boxed{T=9 \text{ dias}}$$

$$\frac{\cancel{M} \cdot \cancel{5}}{\cancel{5}} = \frac{M \cdot 6 + (M-4) \cdot 1 + (M+x) \cdot 2}{9}$$

$$\cancel{9M} = \cancel{9M} - 4 + 2x$$

$$x=2$$