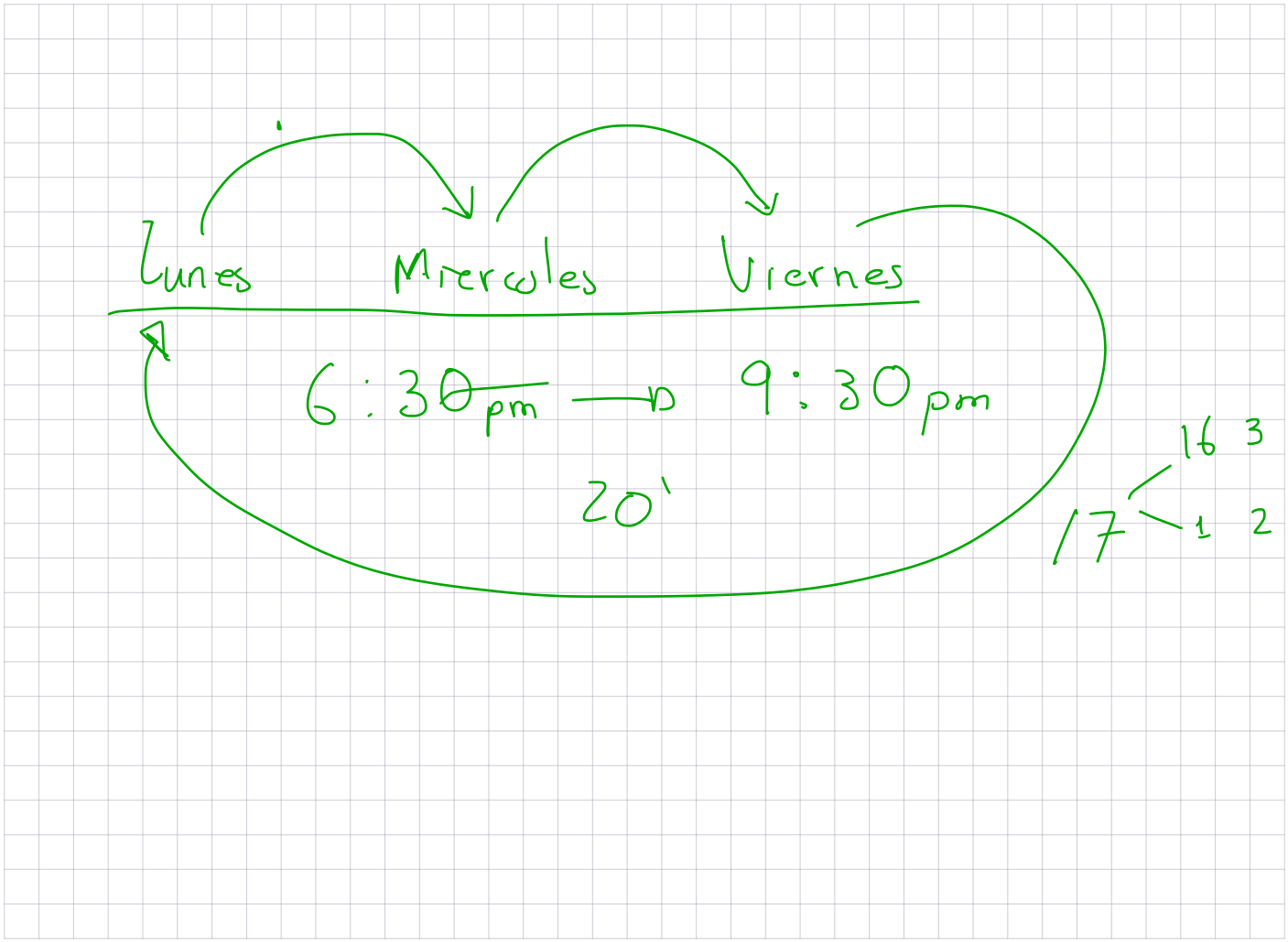

Lunes
Miercoles
Viernes
6:30pm
9:30pm
20'
16 3
17
1 2

Variables

a

ab a

edad

numeroDocumento

edad = 1098

numeroDocumento = "1098"

mes = "Enero"

edad = 20

edad = edad + 1

edad = (edad + 3) / (edad ÷ 3)

1º Reemplazar

Resolver

1 → multi
2 → divis.
3 → sumas
4 – Restas

edad = (edad + 3) / (edad ÷ 3)

edad = (21 + 3) / (21 ÷ 3)

24 / 7

edad = 3,42

Tabla de variables

edad
~~20~~
~~21~~
3,42

1 + 3 × 4 + 3 =>

4 × 4

16 – 3 = 13

1 + 12

13 – 3 = 10

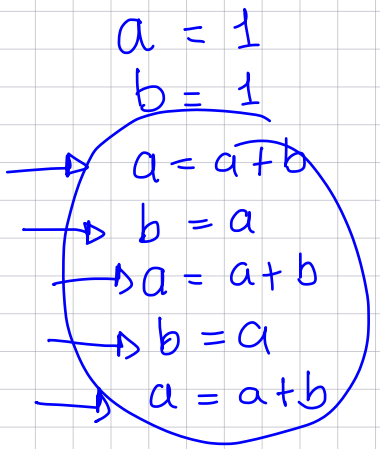
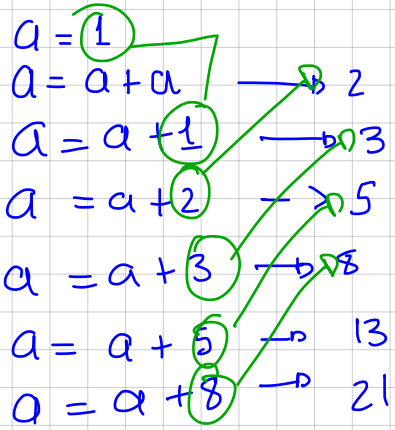


Tabla Variables

a	b
~~1~~	~~1~~
~~2~~	~~2~~
~~4~~	4
8	

a = 4+4

a = 8

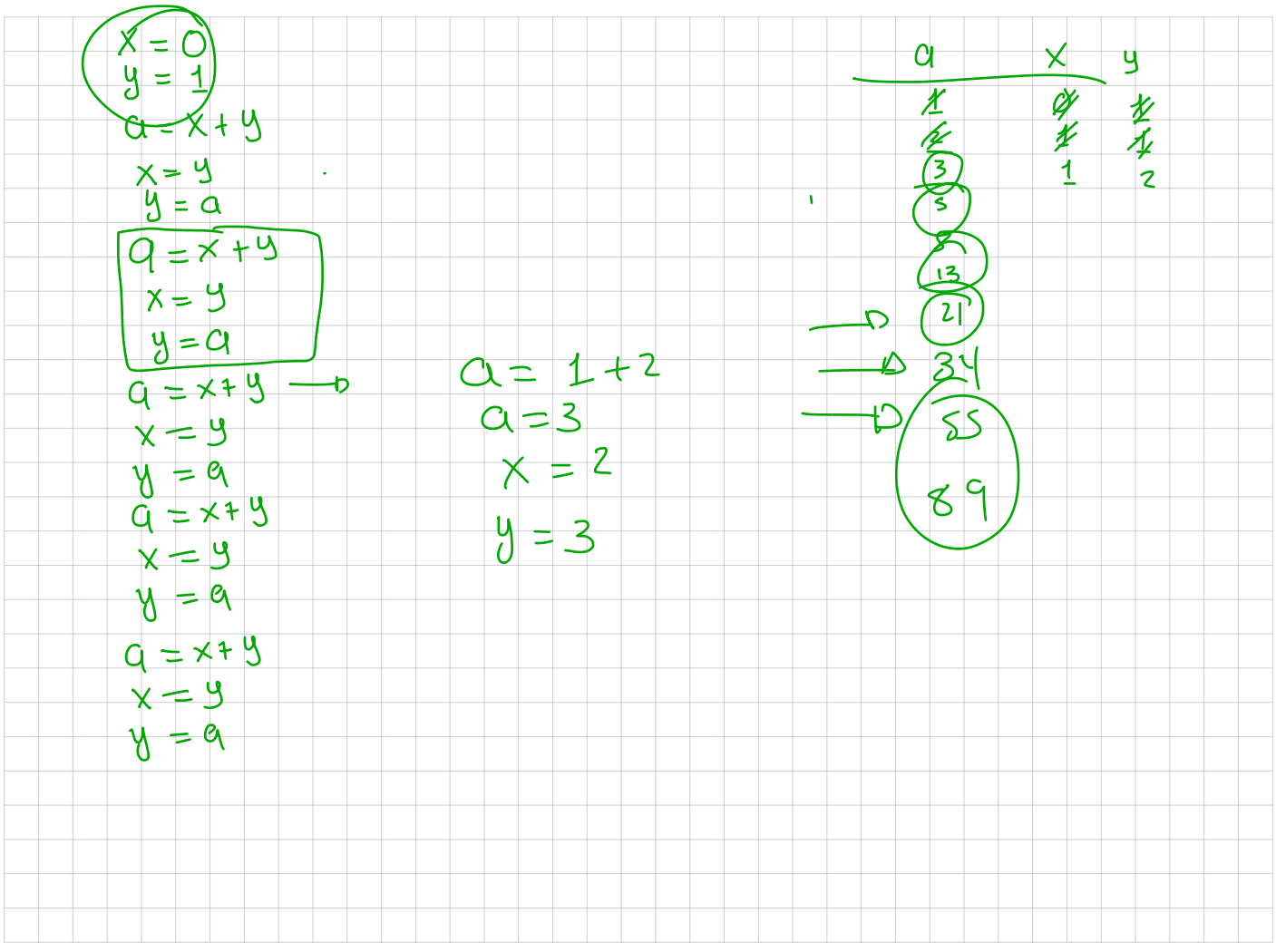


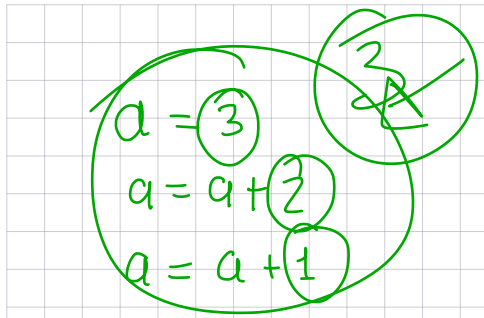
a

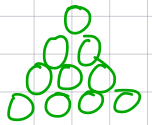
~~1~~
~~2~~
~~3~~
~~5~~
~~8~~
~~13~~
~~21~~

fibonacci

1 2 3 5 8 13 21 34


x = 0
y = 1
a = x + y
x = y
y = a
a = x + y
x = y
y = a
a = x + y
x = y
y = a
a = x + y
x = y
y = a
a = x + y
x = y
y = a
a = 1 + 2
a = 3
x = 2
y = 3
a
x
y
1
1
2
3
5
8
13
21
34
55
89





$b = \frac{4}{3} \Rightarrow$ a las caras en la base

$a = \frac{b \times (b+1)}{2}$

$\frac{3 \times (3+1)}{2}$

$\frac{3 \times 4}{2} = \frac{12}{2} = 6$

a
~~3~~
~~6~~
6

a
~~4~~
~~7~~
~~9~~
10

$5 \Rightarrow 5+4+3+2+1$

$a = \frac{10 \times 11}{2}$

$6 \Rightarrow 6+5+4+3+2+1$

$10 \Rightarrow 10+9+8+7+6+5+4+3+2+1$

n primeros numeros naturales

$$suma = \frac{n * (n+1)}{2}$$

base = 100

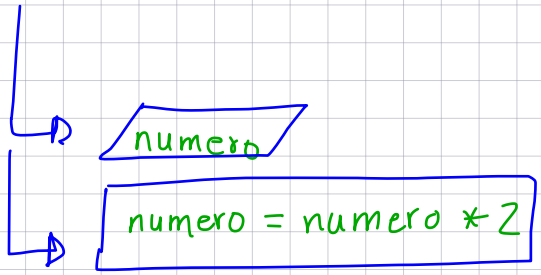
$$CantidadCanicas = \frac{(base) * (base+1)}{2}$$

$$\frac{100 \times 101}{2} = 5050$$

- Programa que calcule el doble de un numero

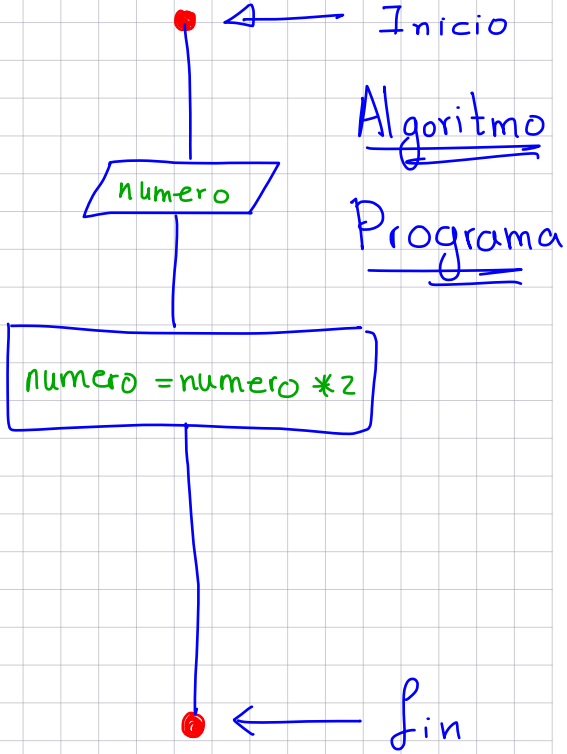
7 → 14

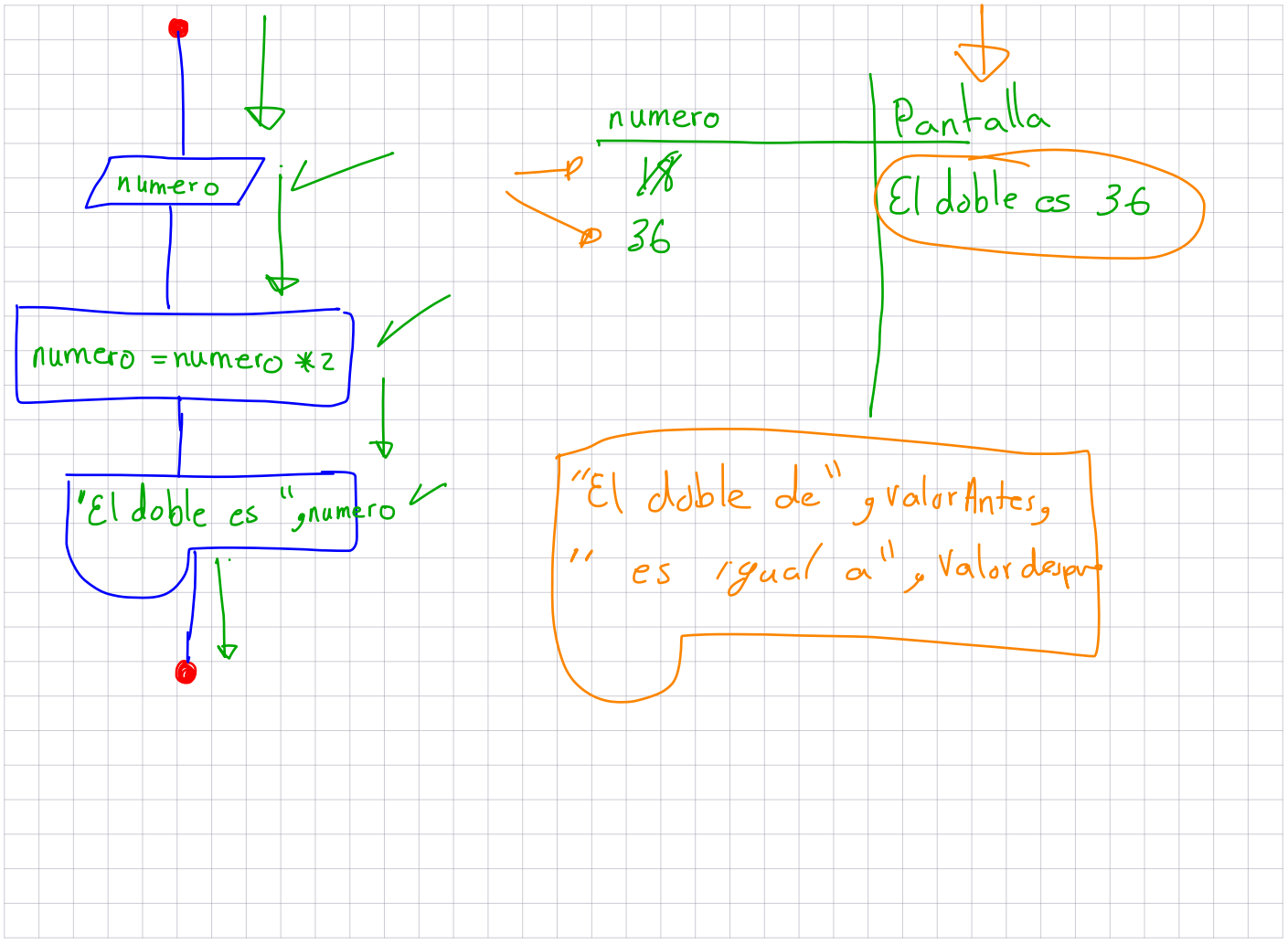
8 → 16

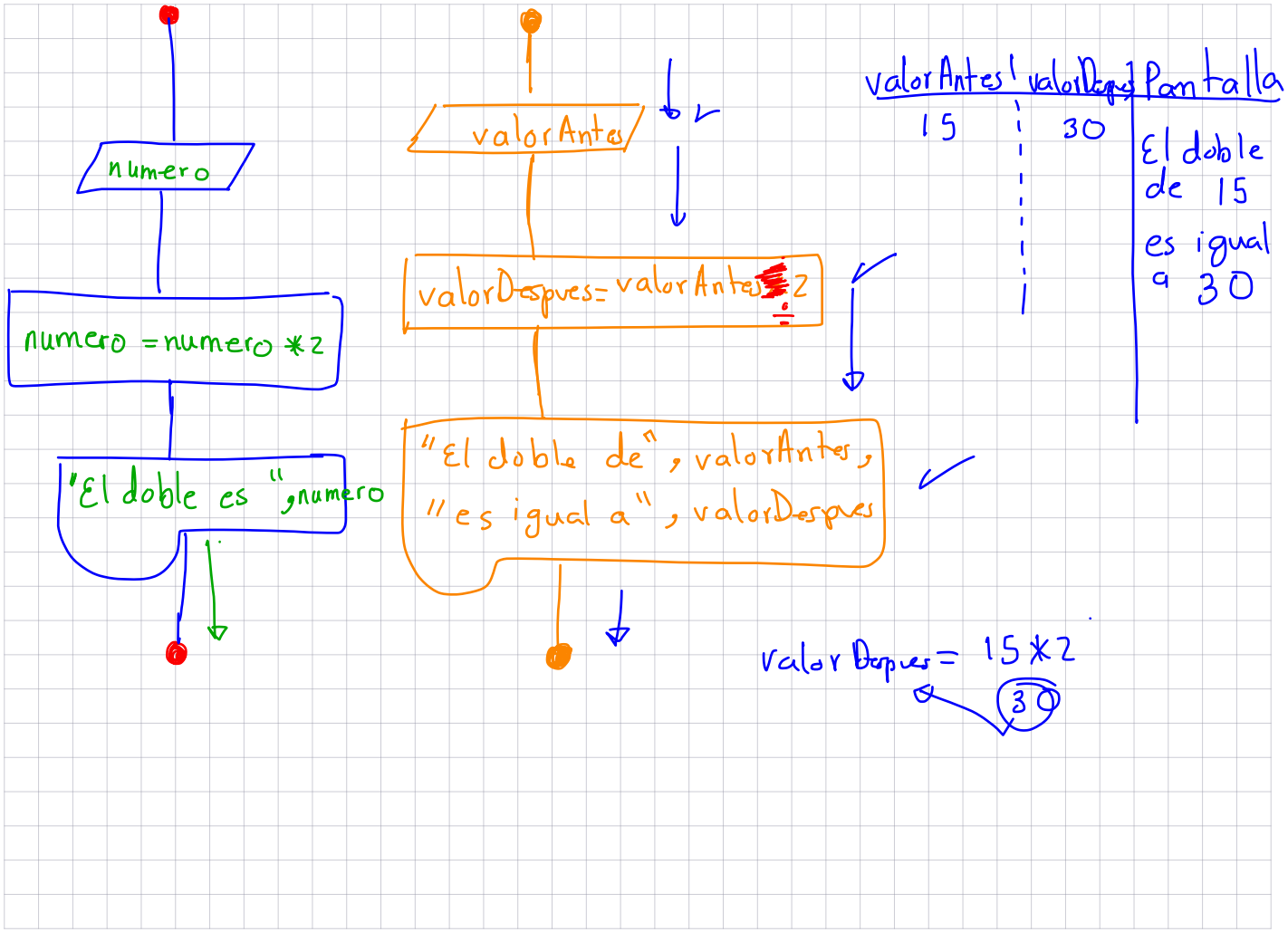


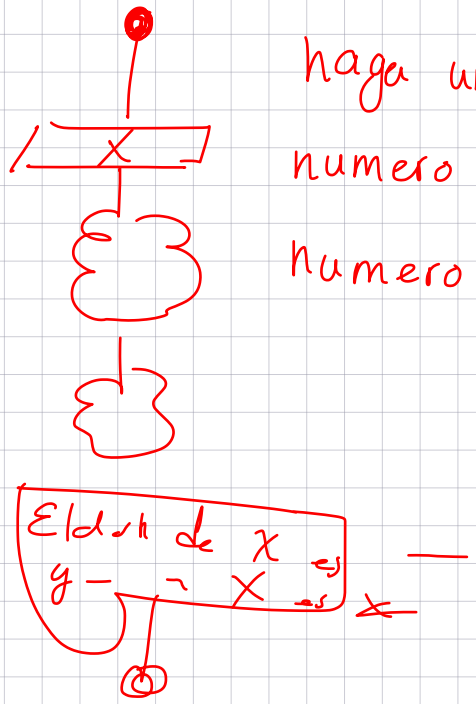
Algoritmo

Programa

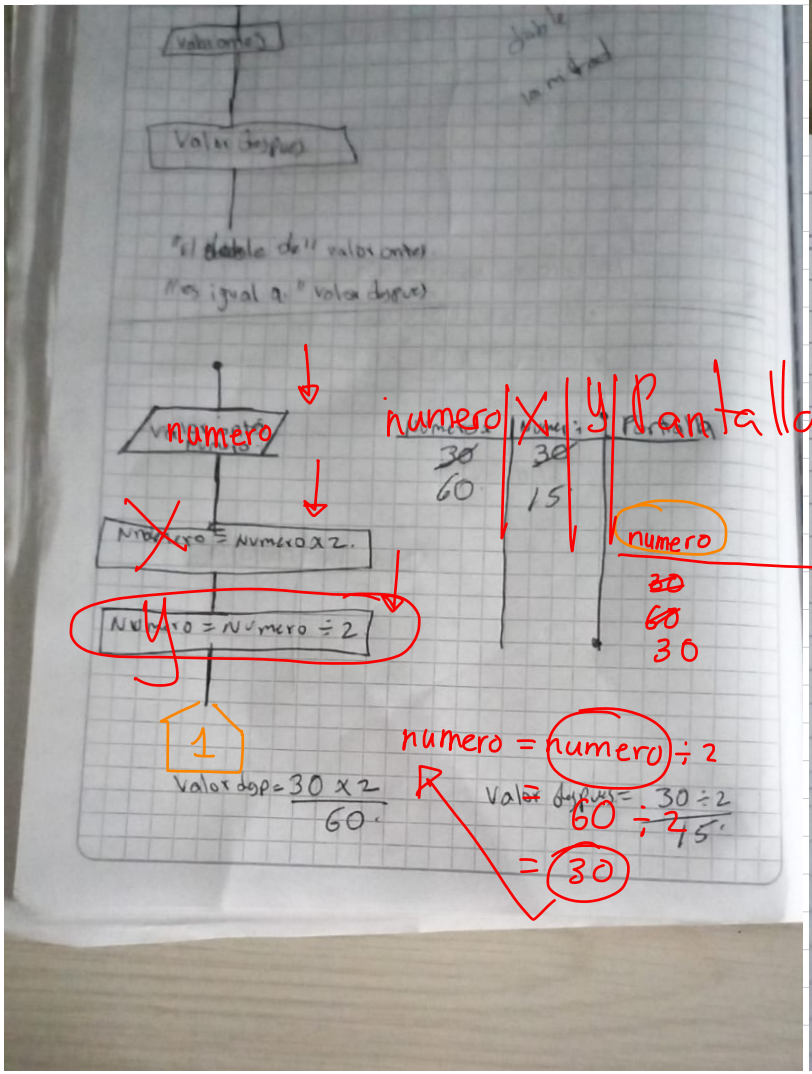


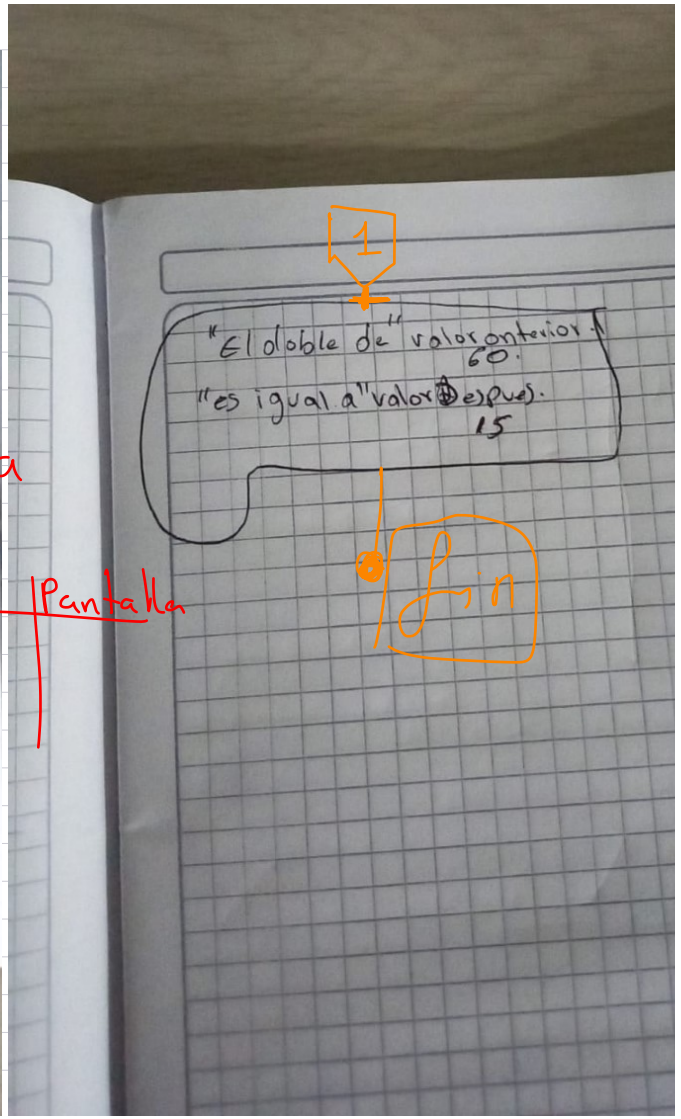

numero
numero = numero * 2
"El doble es ", numero
numero
18
36
Pantalla
El doble es 36
"El doble de ", valorAntes,
" es igual a ", valorDespu

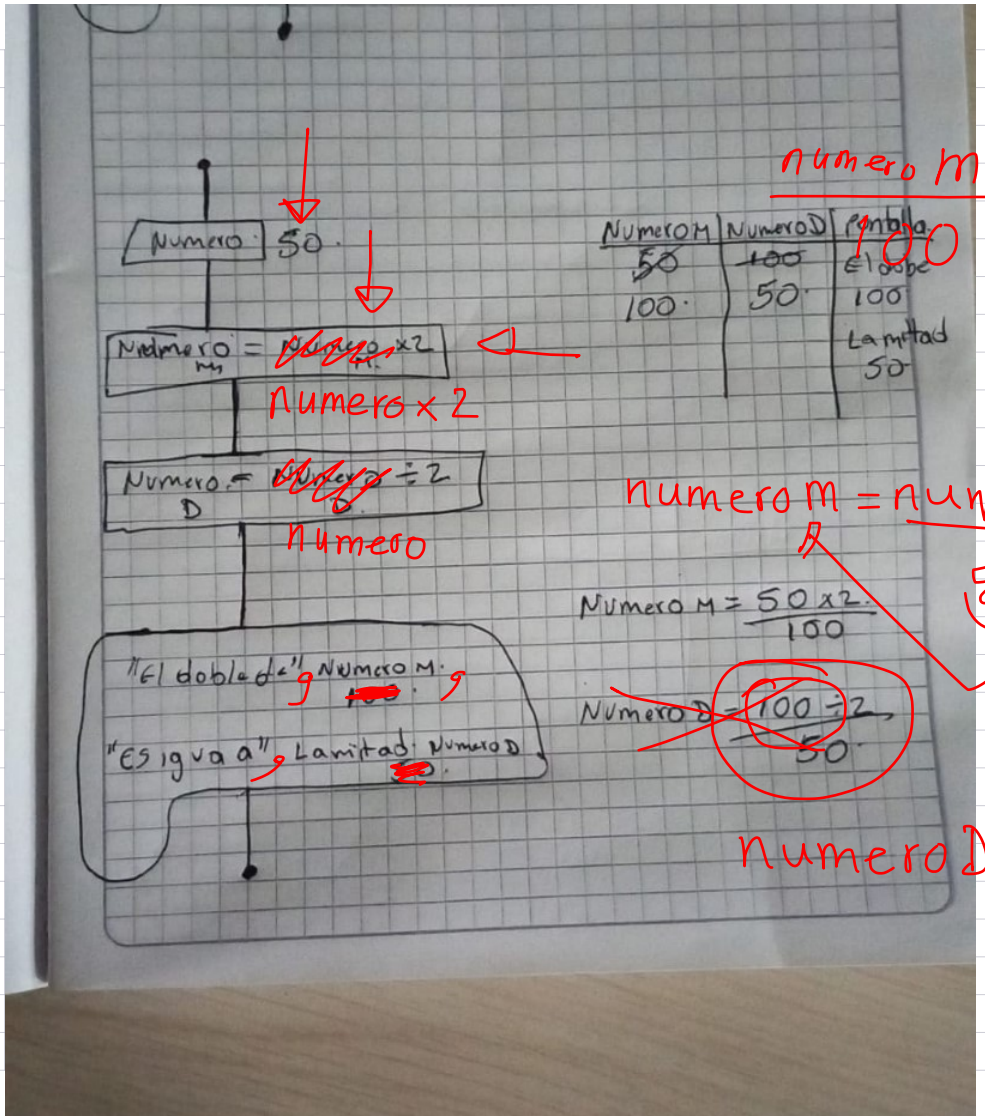

numero
numero = numero * 2
"El doble es ", numero
valorAntes
valorDespues = valorAntes * 2
"El doble de ", valorAntes,
"es igual a ", valorDespues
valorAntes | valorDespues | Pantalla
15 | 30 | El doble de 15 es igual a 30
valorDespues = 15 * 2
30



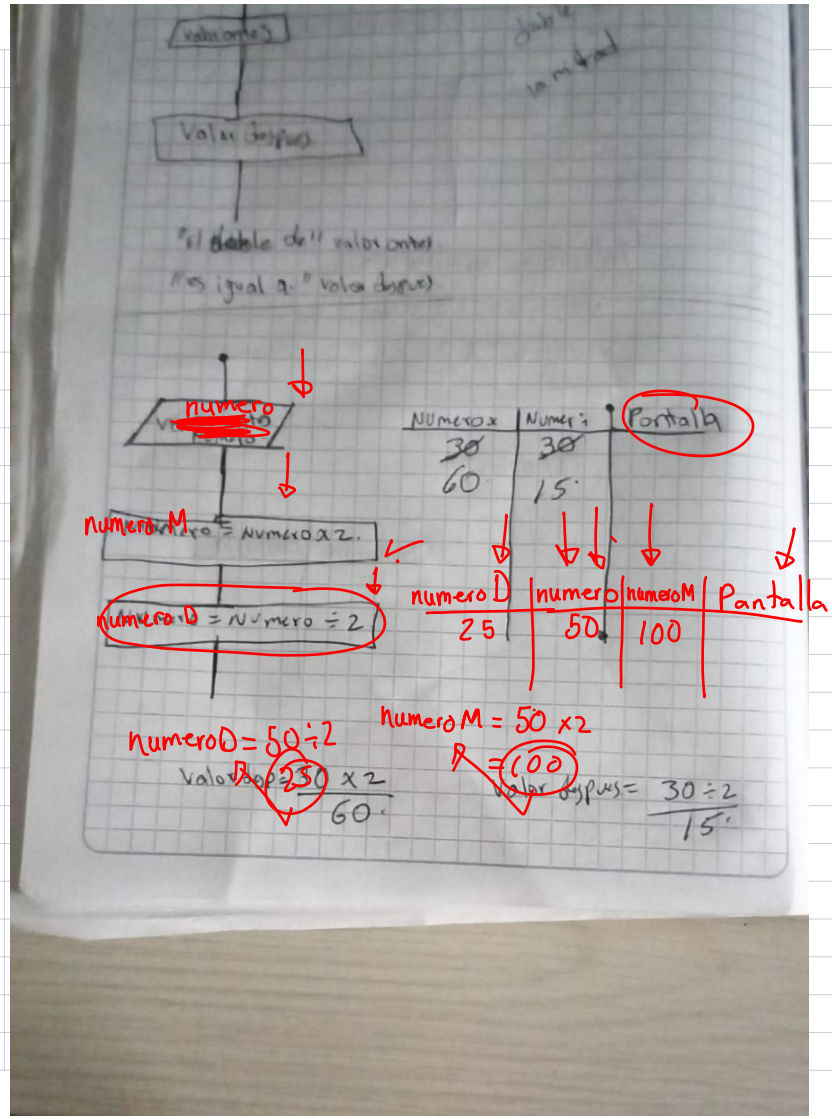
haga un programa ge pida un numero y diga el doble del numero y la mitad del numero


Valor anterior
Valor después
"El doble de" valor anterior
"es igual a" Valor después
numero
Numero = Numero x 2.
Numero = Numero ÷ 2
1
Valor dop = 30 x 2
60.
numero | X | Y | Pantalla
30 | 30
60 | 15
numero
30
60
30
Pantalla
numero = numero ÷ 2
Valor después = 30 ÷ 2
60 ÷ 2 15.
= 30

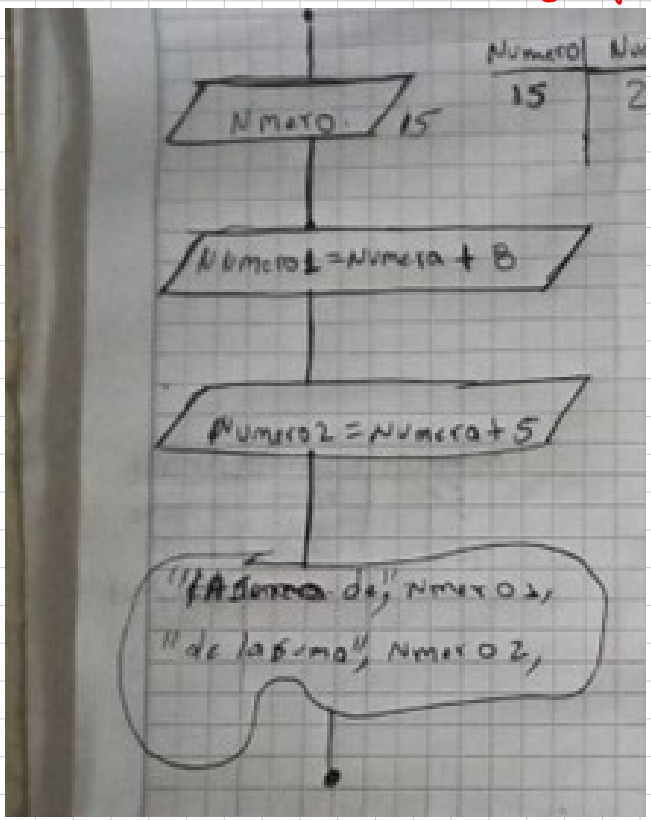

1
"El doble de" valor anterior
60.
"es igual a" valor después.
15
Fin

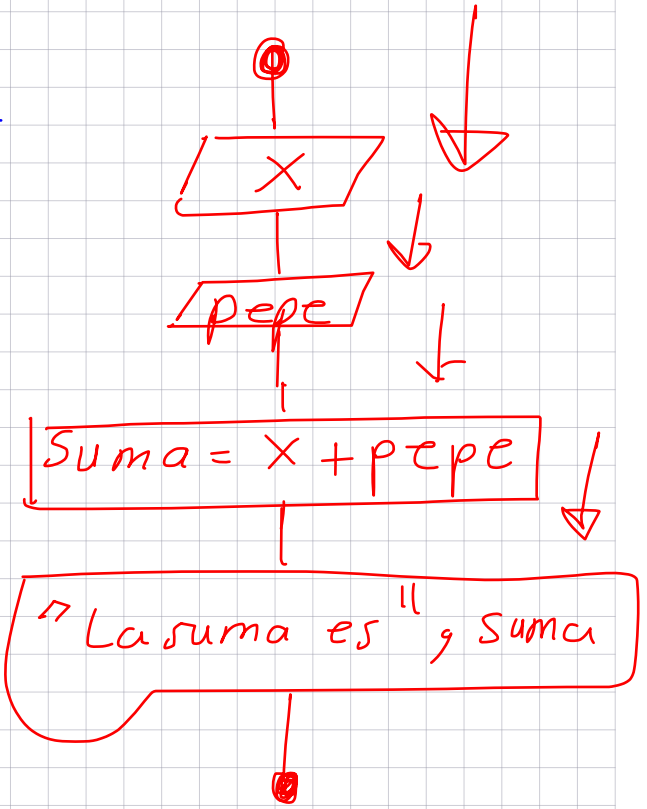

Numero 50
Numero M = Numero x2
Numero x 2
Numero D = Numero ÷ 2
Numero
"El doble de" Numero M
"Es igual a" Lamitad Numero D
NumeroM NumeroD Pantalla
50 100 El doble
100 50 100
Lamitad
50
numero M numero Pantalla
50 100
numero M = numero x 2
50 x 2
100
Numero M = 50 x 2
100
Numero D = 100 ÷ 2
50
numero D = 50 ÷ 2

50 ⟶ El doble de 50 es 100
y la mitad de 50 es 25


Valor anterior
Valor siguiente
"el doble de" valor anterior
"es igual a" valor siguiente
numero
numeroM = Numero x 2
numeroD = Numero ÷ 2
Numero x
Numero ÷
Pantalla
30
60
30
15
numeroD
numero
numeroM
Pantalla
25
50
100
numeroD = 50 ÷ 2
Valor anterior = 30 x 2
60
numeroM = 50 x 2
= 100
Valor siguiente = 30 ÷ 2
15

⇒ hacer un programa que sume 2 numeros.
* los 2 numeros hay que pedirlos

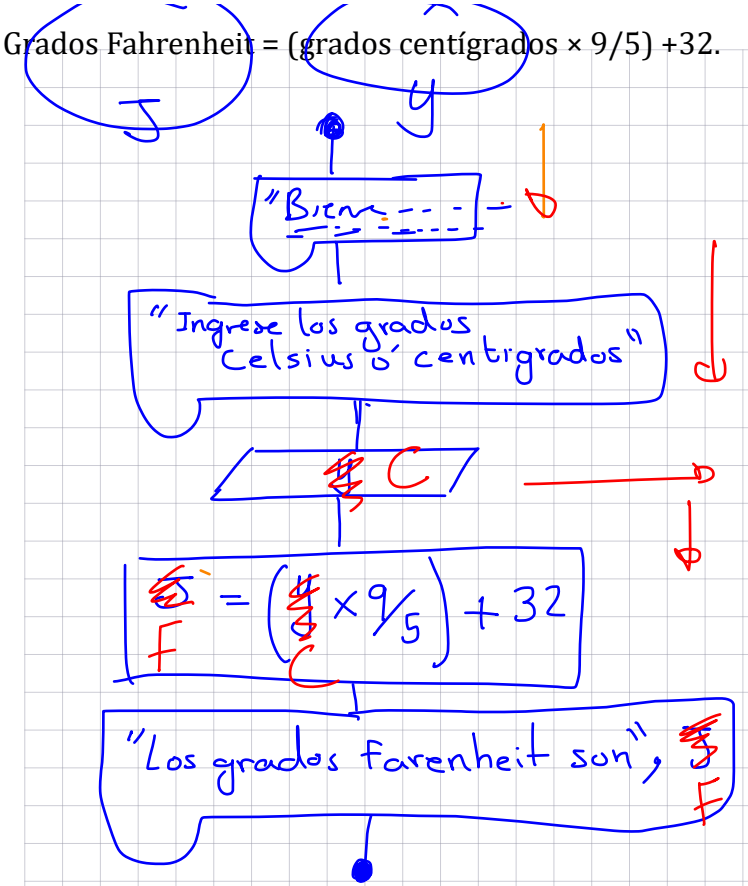




→ hacer un programa que convierta grados Celsius a grador Farenheit

- 1 → Ingrem los celsius
  2 → pedir cuantos grados
  ③ – APLICAR FORMULA ⇒ GOOGLE
  4 mostrar lo convertido

Grados Fahrenheit = (grados centígrados × 9/5) +32.

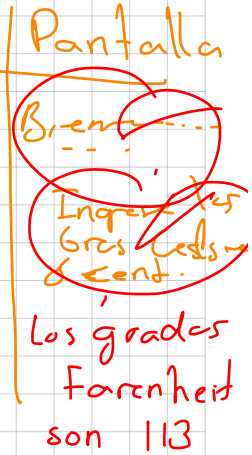


Pruebas de Escritorio

y	J
45	113

J = (45 x 9/5) + 32

J = 113



Grados centígrados = (grados Fahrenheit – 32) × 5/9.

Farenheit a Celsius
Centigrados

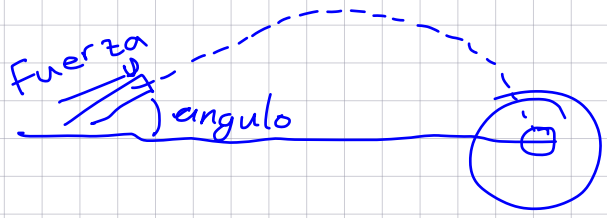
$$\boxed{C = (F - 32) \times 5/9} \Rightarrow C = (F - 32) \times \frac{5}{9}$$

$$C = (5 - 32) \times 5/9 \Rightarrow$$

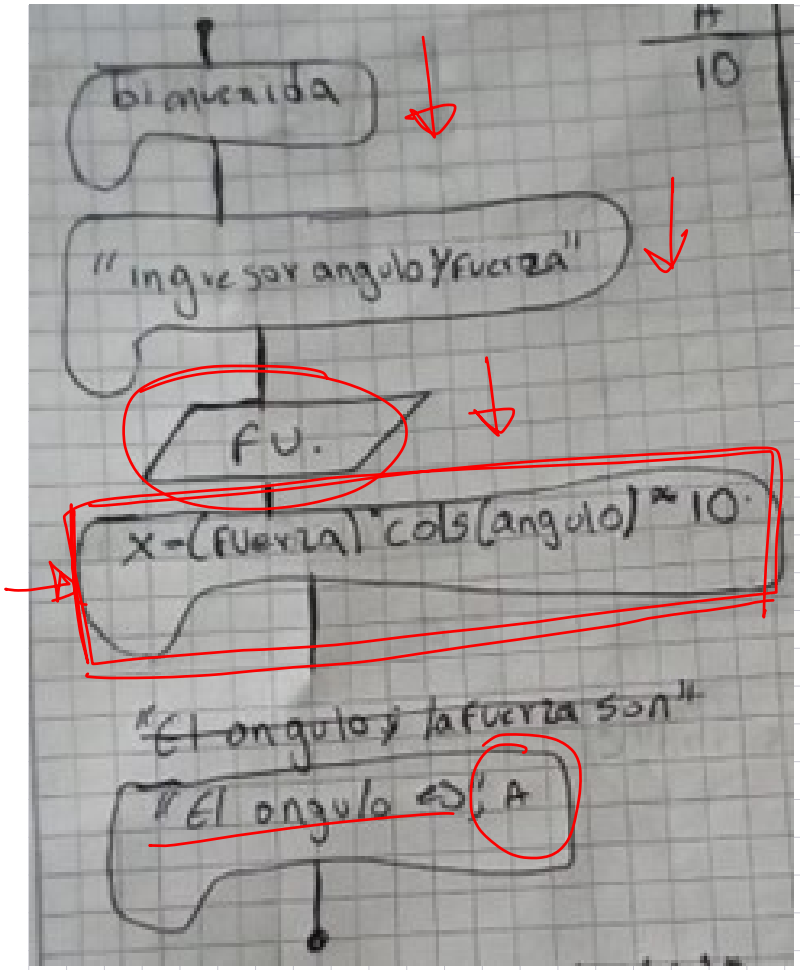
$$(-27) \times 5/9$$

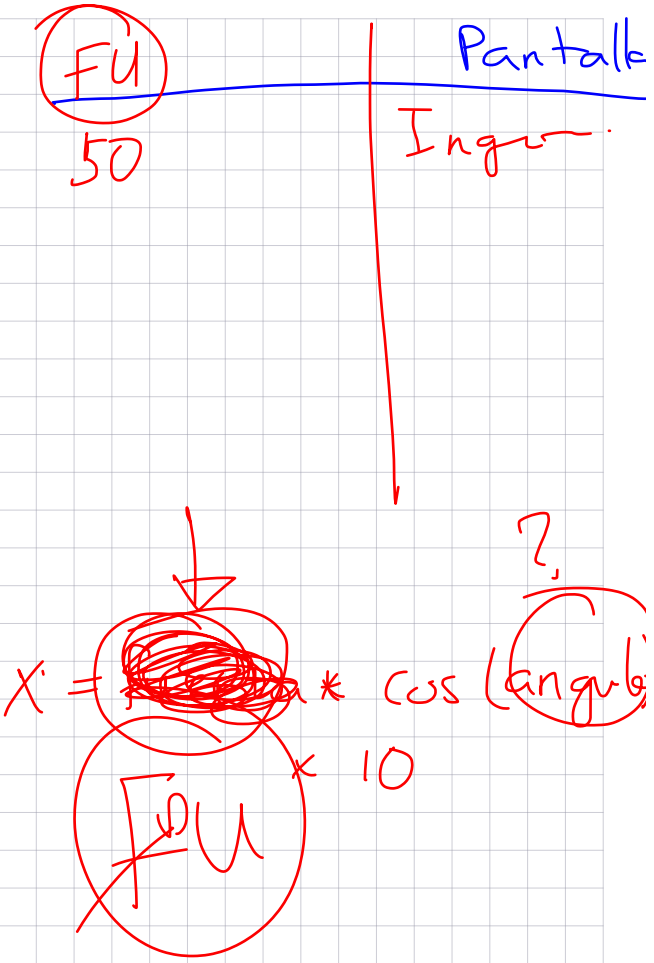
Angulo

Fuerza



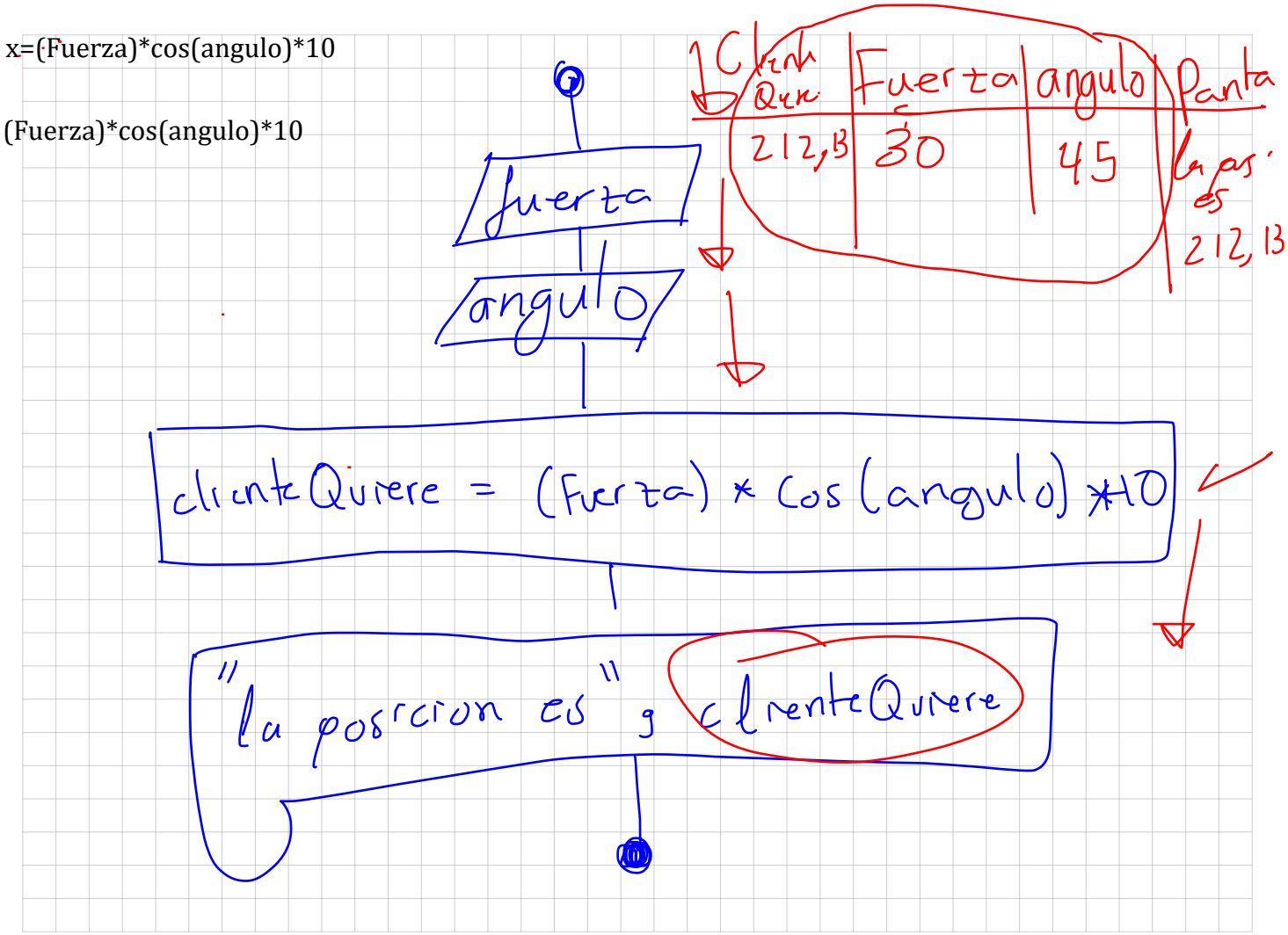
x=(Fuerza)*cos(angulo)*10


bienvenida
"ingresar angulo y fuerza"
FU.
x=(Fuerza)*cos(angulo)*10
"El angulo y la fuerza son"
"El angulo =>" A
10


FU
50
Pantalla
Ingr
?,
x' = * cos (angulo
* 10
FU

x=(Fuerza)*cos(angulo)*10

(Fuerza)*cos(angulo)*10



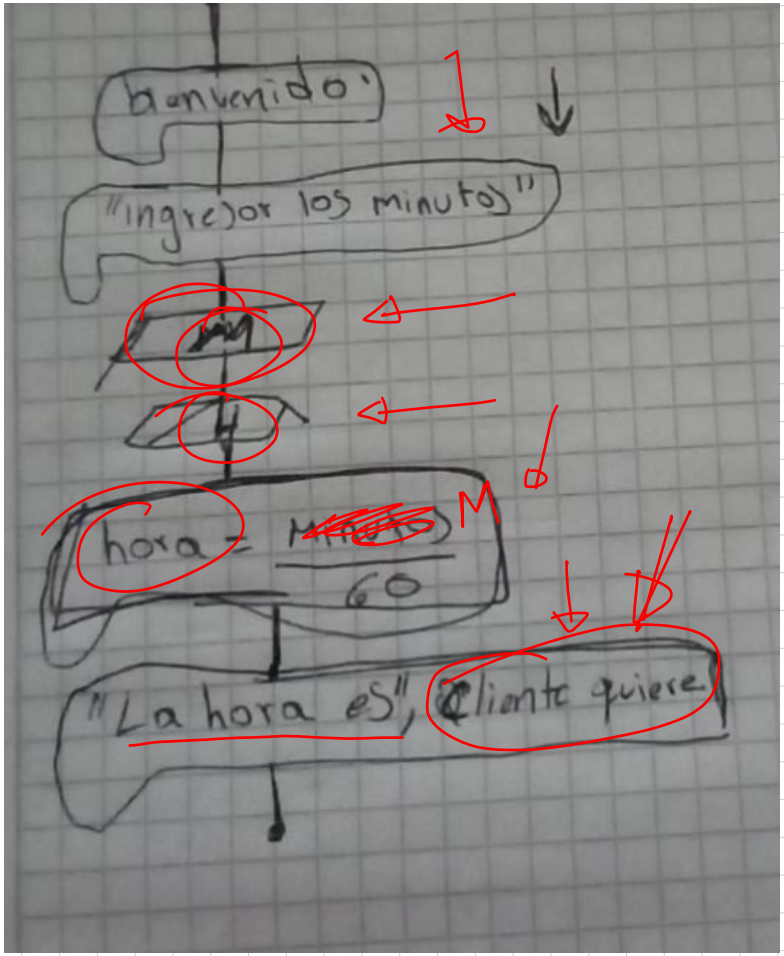
* Convertidor de minutos a horas

60 → 1

120 → 2

formula =

$$\text{horas} = \frac{\text{minutos}}{60}$$

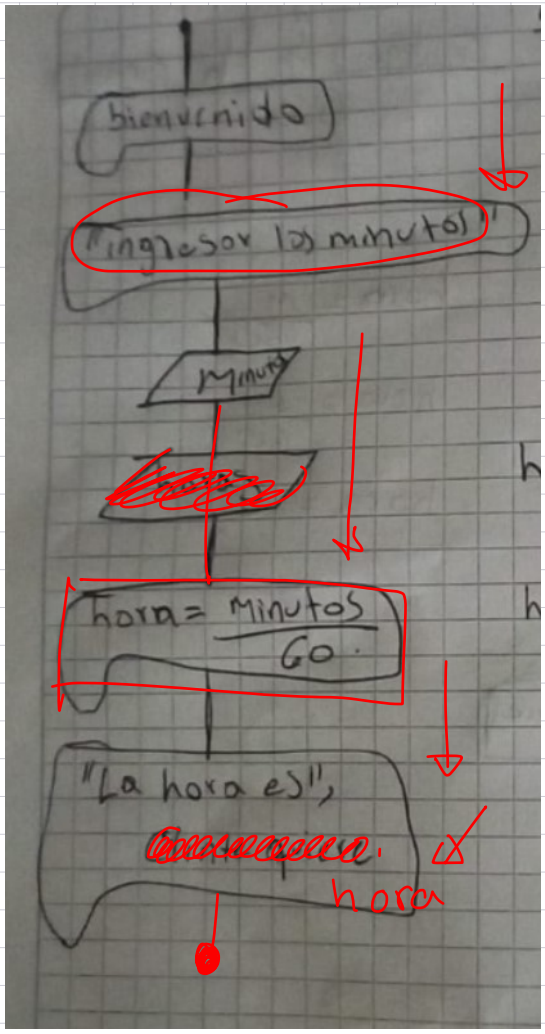


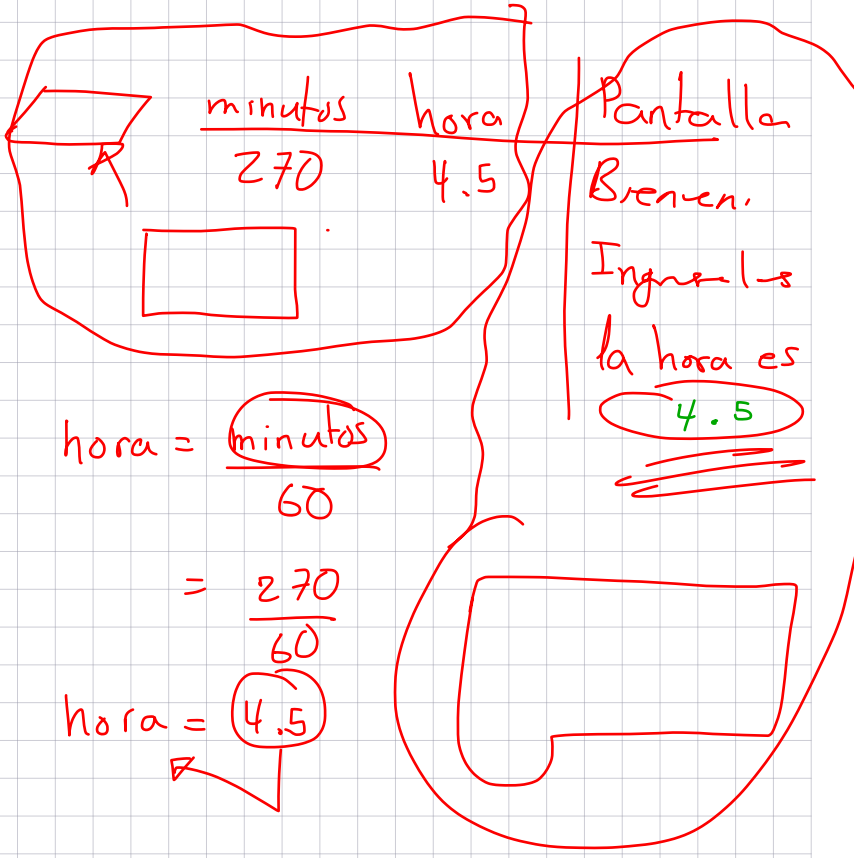
M	H	hora	Pantalla
60	60	1	Ingrese...
			La hora es

$$hora = \frac{M}{60}$$

$$hora = \frac{60}{60}$$

$$hora = 1$$


Bienvenido
Ingresar los minutos
Minutos
hora = minutos / 60
"La hora es",
hora


minutos
hora
270
4.5
Pantalla
Bienven.
Ingrese los
la hora es
4.5
hora = minutos / 60
= 270 / 60
hora = 4.5

* Convertidor de pies a kilometros

1 pie = 30.48 cm

1 metro = 100 cm

1 Kilometro = 1000 metro

5000 pies ⟹ ? 1,524 kmetros

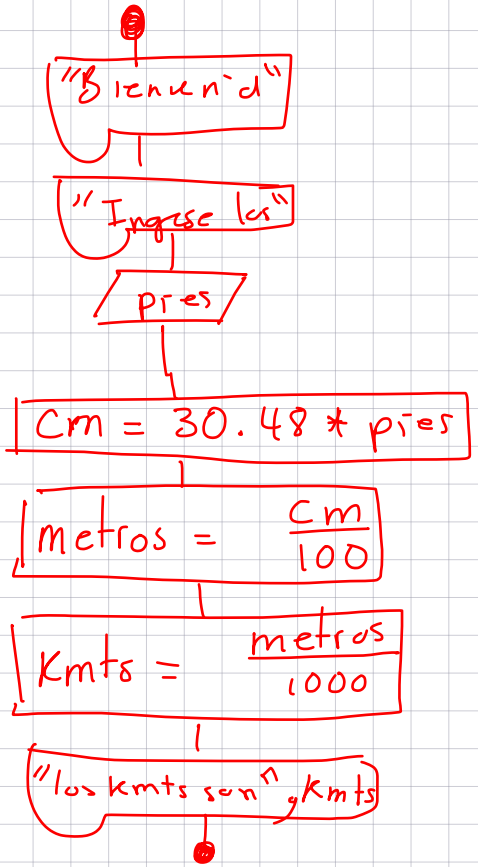
30000 pies => 9,144 kmetros

pies = 30000

$F1 = 30.48 * pies$

$F2 = \frac{F1}{100}$

$F3 = \frac{F2}{1000}$



$$f(x) = \frac{3x}{x} \equiv f(x) = 2x$$

$$\frac{30.000\ pies}{1} * \frac{30.48\ cm}{1\ pies} * \frac{1\ metros}{100\ cm} * \frac{1\ kmts}{1000\ metro}$$

$$kilometros = \frac{PIES \times 30.48 \times 1 \times 1}{1 \times 1 \times 100 \times 1000} \Rightarrow \boxed{\frac{PIES \times 30.48}{100.000}}$$

kilometros → yardas

21kmts

1 yarda = 0,9144 mts

1 yarda = 91,44cms

22 975

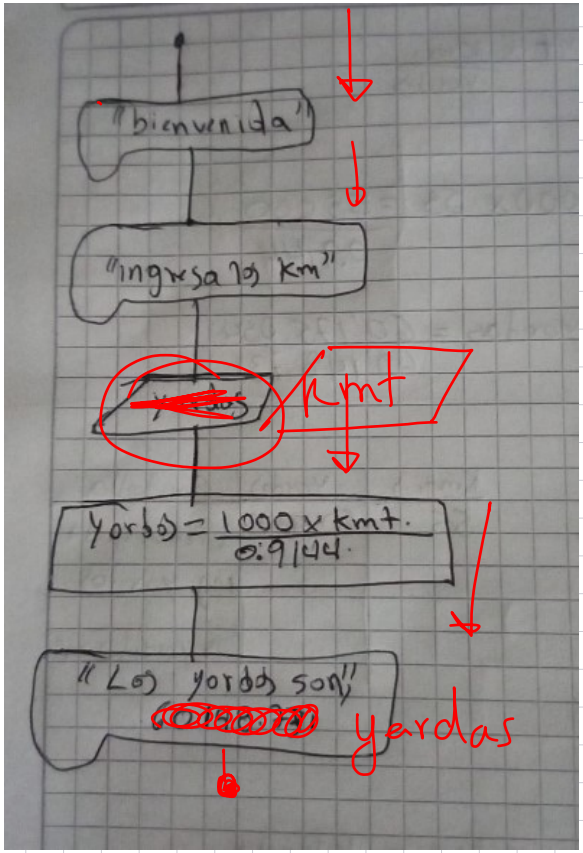
22.965,879

55kmts

55km

yardas $= \frac{\text{metres} \times \text{kmts}}{\text{yardes}} = \frac{1000 \times 55}{} = \frac{55.000}{0.9144}$

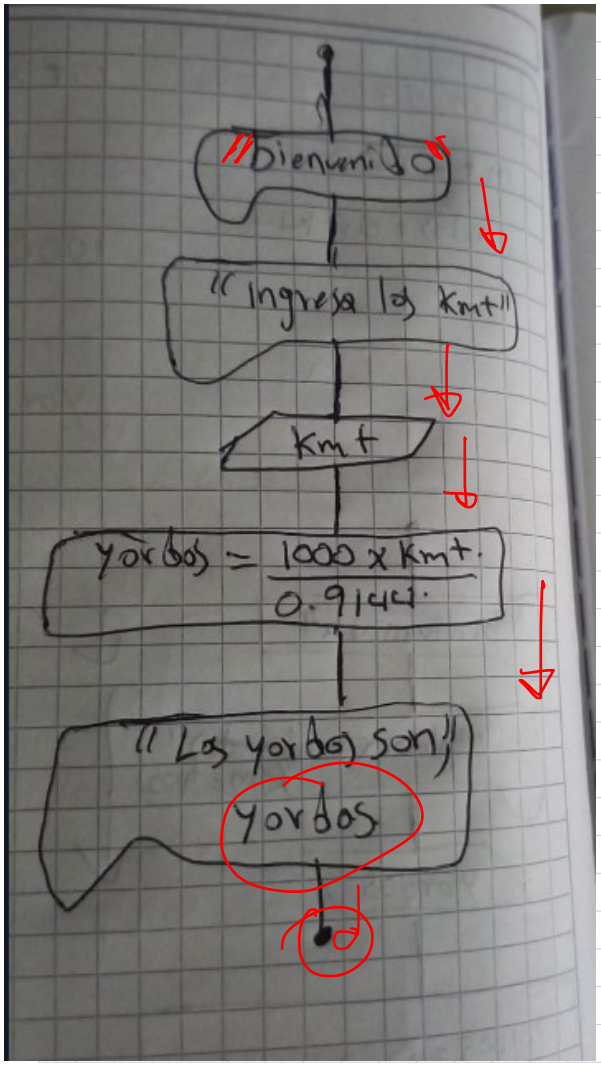
$$\text{yardas} = \frac{1000 \times \text{kmts}}{0.9144}$$



yardas	kmt	Pantalla
109361,32	100	bienvenida Ingresa los km Las yardas son 6011

$$yardas = \frac{1000 \times kmt}{0.9144}$$

$$yardas = \frac{1000 \times 100}{0.9144...} = 109361,32$$



kmt	yardas	Pantalla
50	54680.6649	Bienvenida Ingrese los kmt las yardas son 54680.

$$yardas = \frac{1000 \times kmt}{0.9144}$$

$$= \frac{1000 \times 50}{0.9144}$$

$$yardas = 54680,6649$$

*Convertir de onzas a litros

1 onza → 28.35 gramos

peso

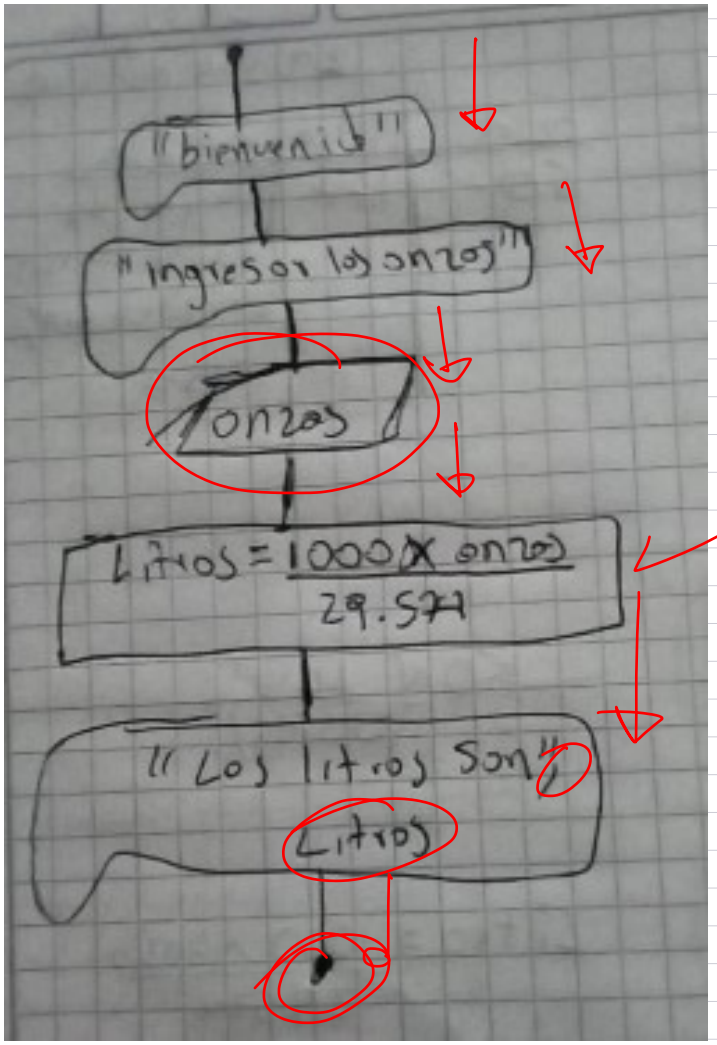
1 Litro 1000 mililitros

↓

volumen

1 onza líquido 29.574 mililitros líquido

litros = onzas * 1000 ?

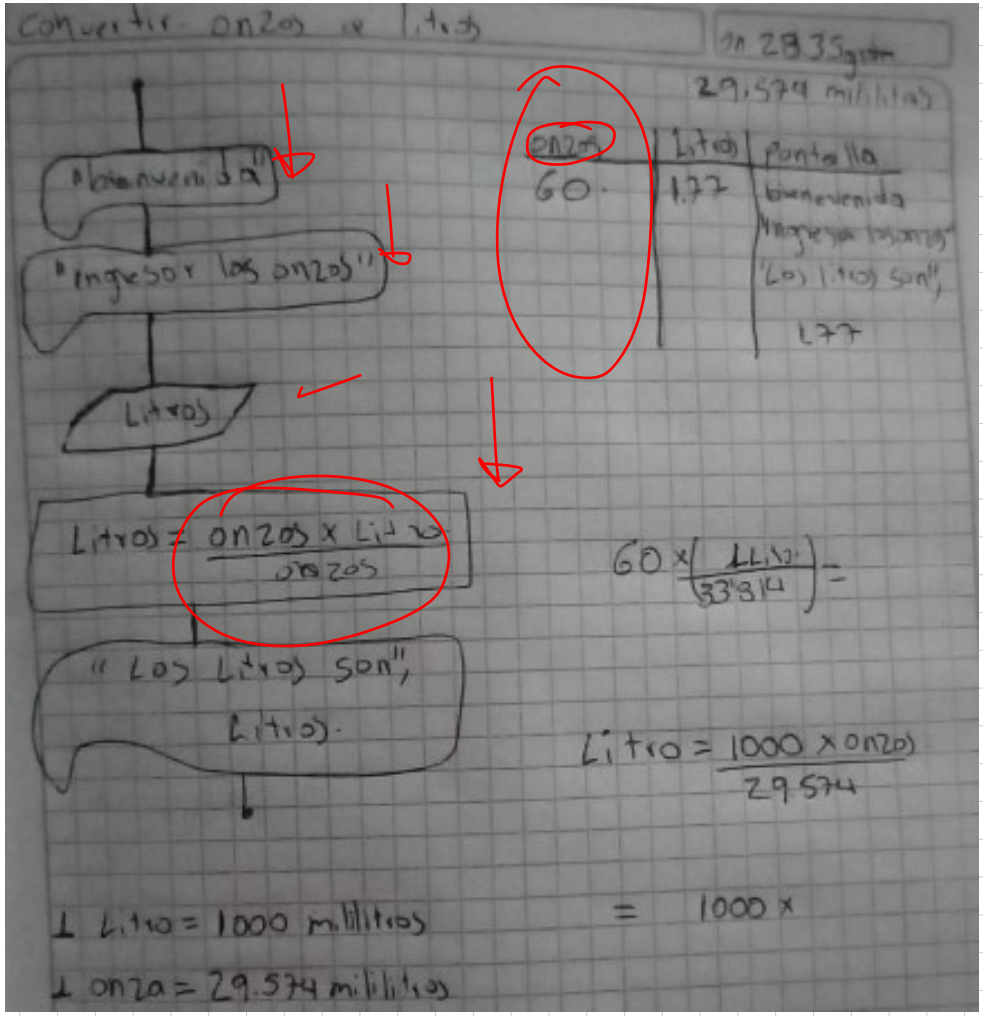


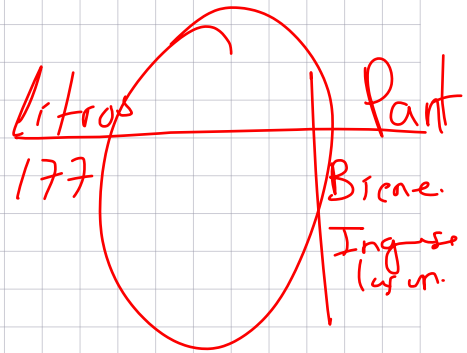
onzas	litros	Pantalla
30	1014,40	Bienvenida IngreseOnzas >30 los litros su 1014,40

$$litros = \frac{1000 \times onzas}{29,574}$$

$$litros = \frac{1000 * 30}{29,574}$$

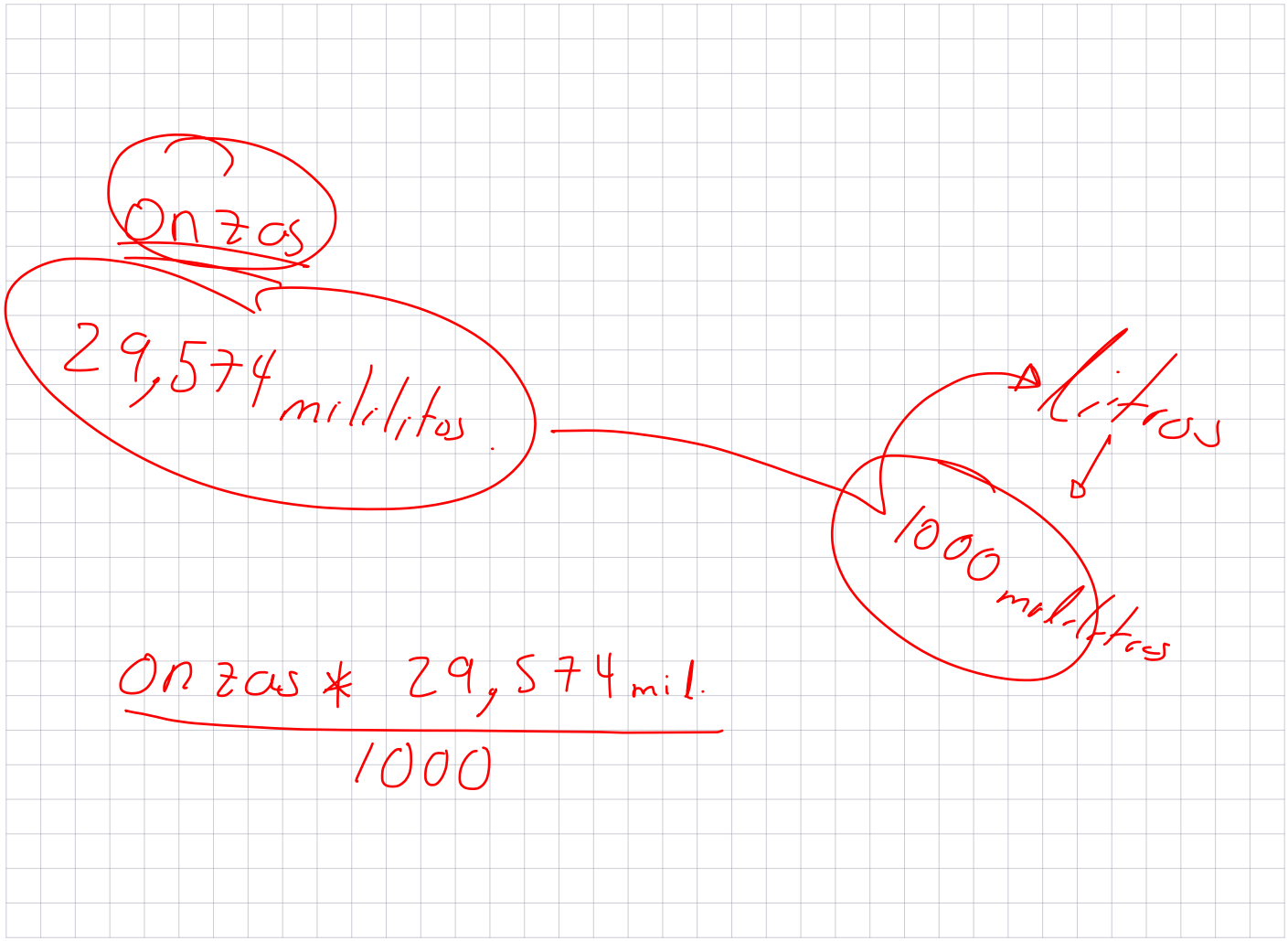
$$litros = 1014,40$$





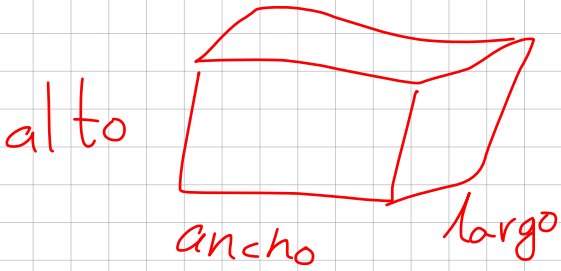
litros = onzas * litros / onzas

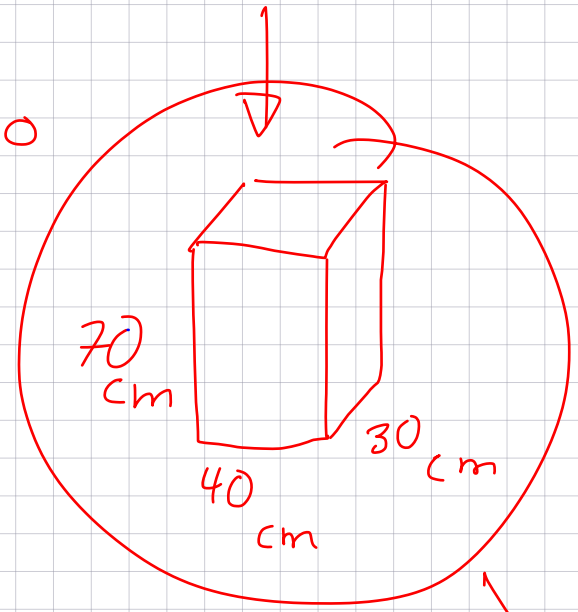
litros = ____ * 177

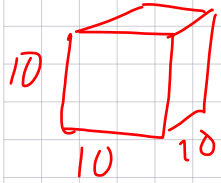


$$\frac{\text{Onzas} * 29{,}574\ \text{mil.}}{1000}$$

Volumen de un cubo







1000 ml/lt

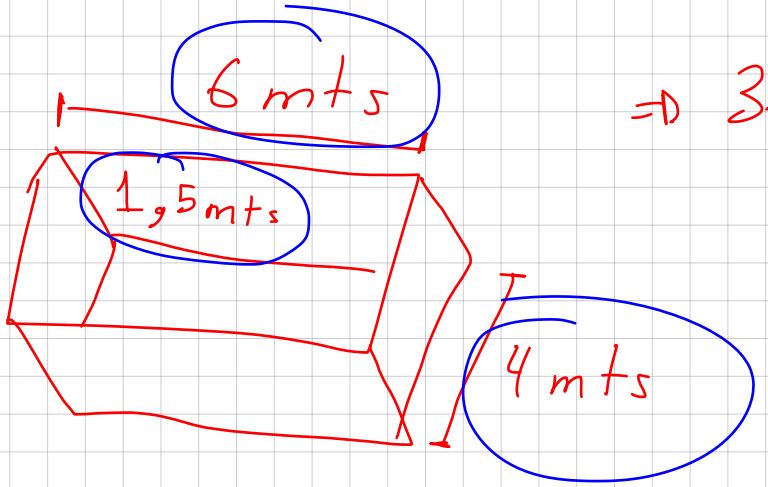
1 Litro

Volumen = 30 × 40 × 70

Volumen = 84.000 ml/litros ⇒ 84 litros

1 Litro de Agua ⇒ 1 kgramo

→



$\Rightarrow 36 mts^3$

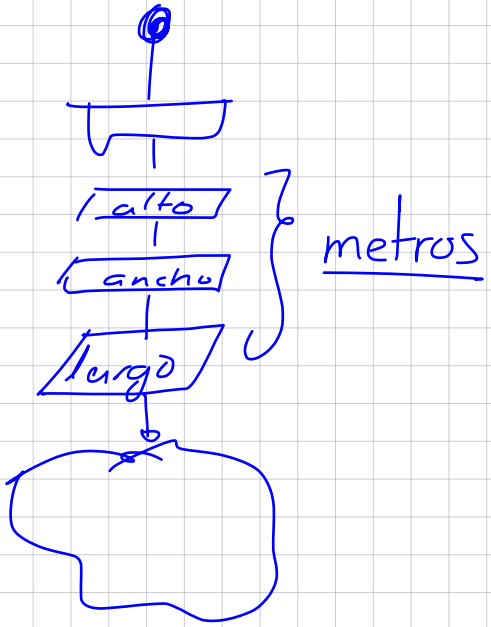
- $1 mts^3$? $\Rightarrow 600 \times 150 \times 400 = 36\,000\,000$

mililitros

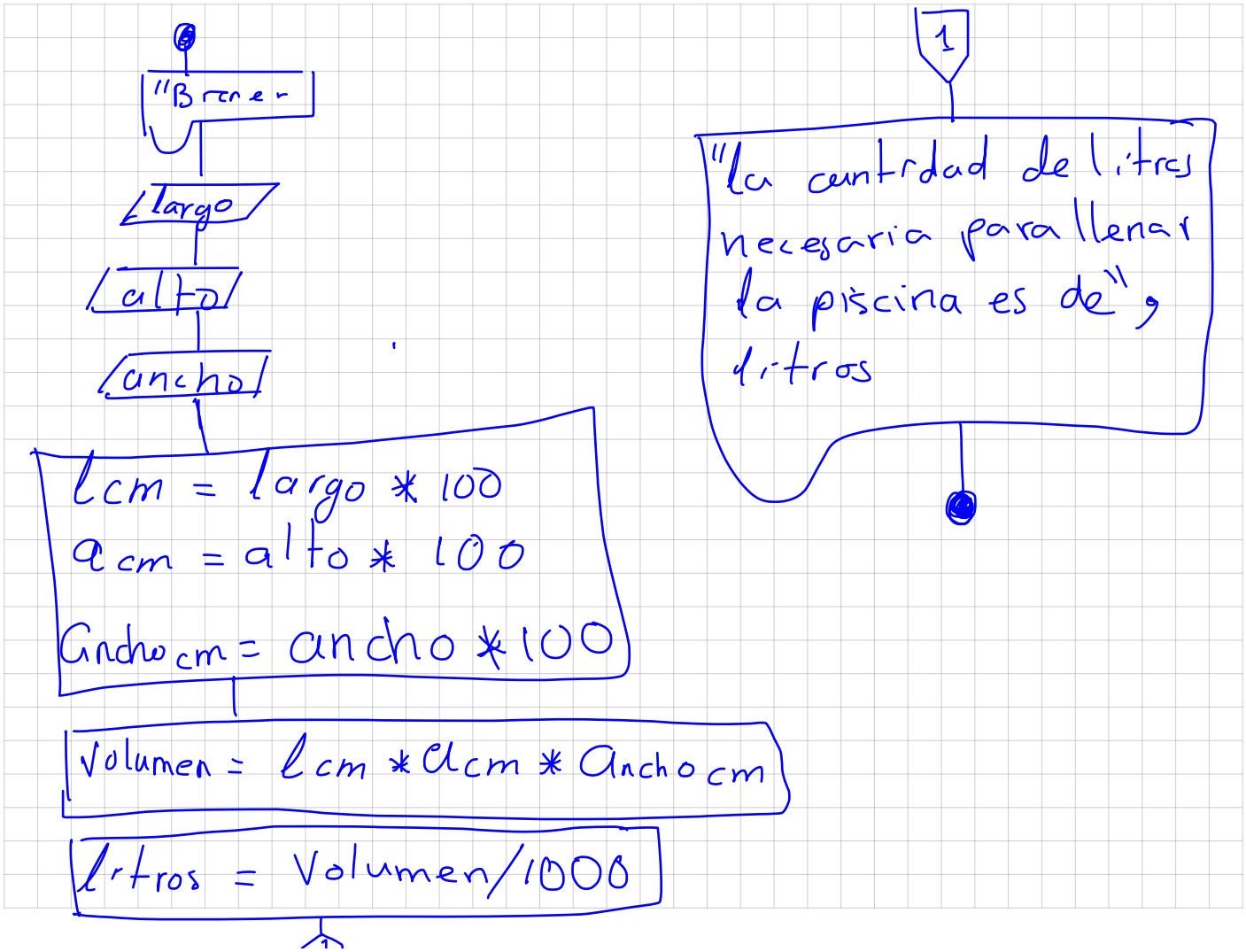
$36\,000\,000 \div 1000$

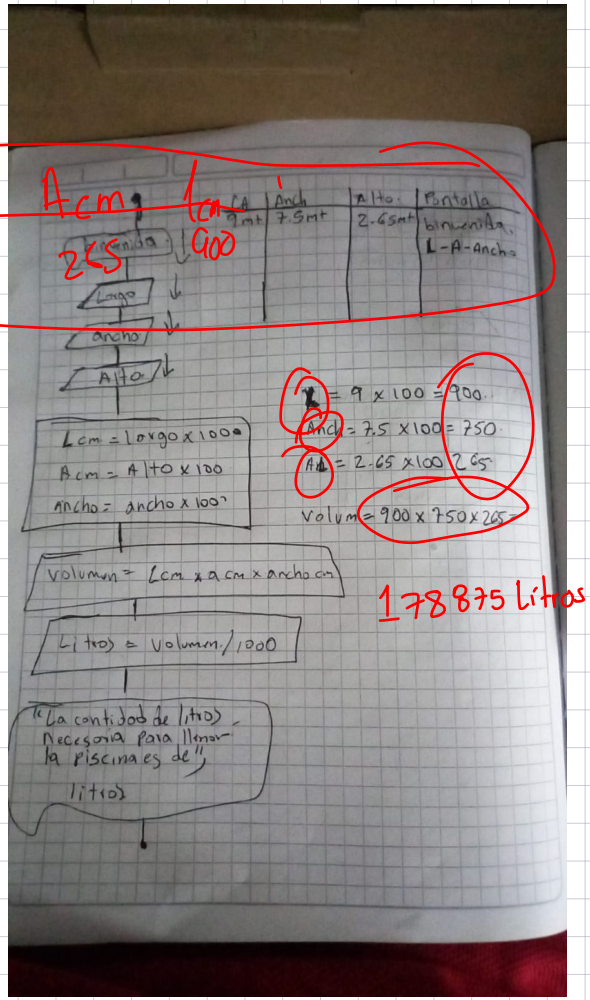
l

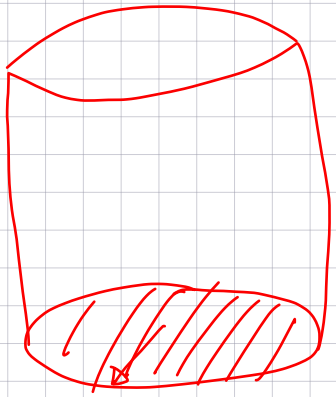
36000 Litros



"la cantidad de litros que necesitan para llenar la piscina son ", litros


"Bienvenido"
largo
alto
ancho
lcm = largo * 100
acm = alto * 100
Ancho cm = ancho * 100
Volumen = lcm * acm * Ancho cm
Litros = Volumen/1000
1
"La cantidad de litros necesaria para llenar la piscina es de", litros


Ancho
750
Acm
Lcm
255
900
Inicio
Largo
ancho
Alto
Lcm = Largo x 100
Acm = Alto x 100
Ancho = ancho x 100
Volumen = Lcm x Acm x ancho cm
Litros = Volumen / 1000
"La cantidad de litros necesaria para llenar la piscina es de" litros
Lcm | Acm | Ancho | Alto | Pantalla
9mt | 7.5mt | 2.65mt | bienvenida
L-A-Ancho
= 9 x 100 = 900
Anch = 7.5 x 100 = 750
= 2.65 x 100 265
Volum = 900 x 750 x 265
178875 Litros

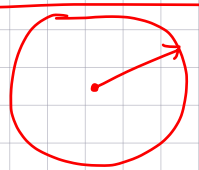


$\pi = 3,14159\ldots$

h = altura

VolumenCilindro = AreaO * h

$= 3,14 * r^2 * h$

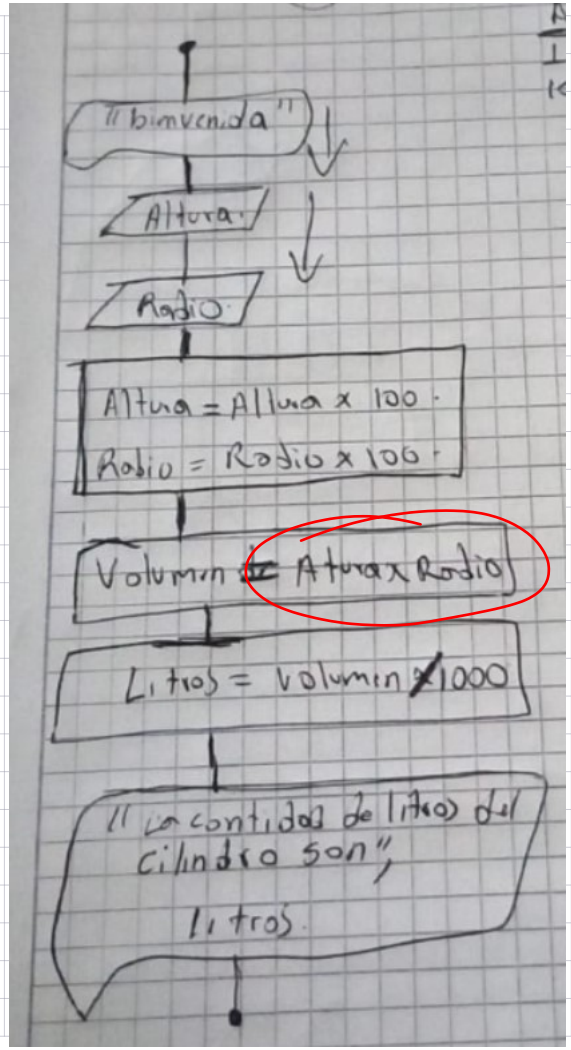


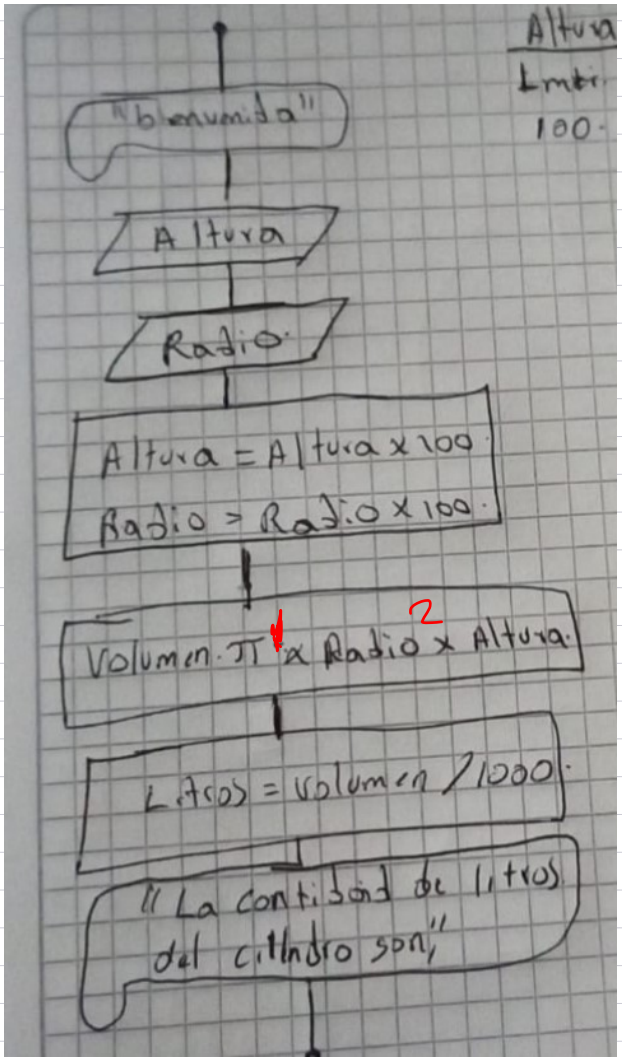
$AreaO = \pi r^2$

$= 3,14 * r^2$

$5^2 \Leftarrow 25 \Rightarrow 5 \times 5$

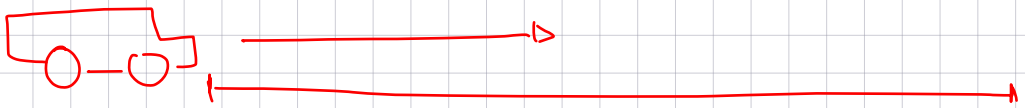
$r^2 = r * r$


"bienvenida"
Altura
Radio
Altura = Altura x 100
Radio = Radio x 100
Volumen = Altura x Radio
Litros = Volumen / 1000
"La cantidad de litros del cilindro son",
Litros


"bienvenida"
Altura
Radio
Altura = Altura x 100
Radio = Radio x 100
Volumen = π x Radio² x Altura
Litros = Volumen / 1000
"La cantidad de litros del cilindro son",

→ millas á kms

→



Kmts
se mueve?

Velocidad ·
tiempo ⇒ Kmts = Velocidad x tiempo