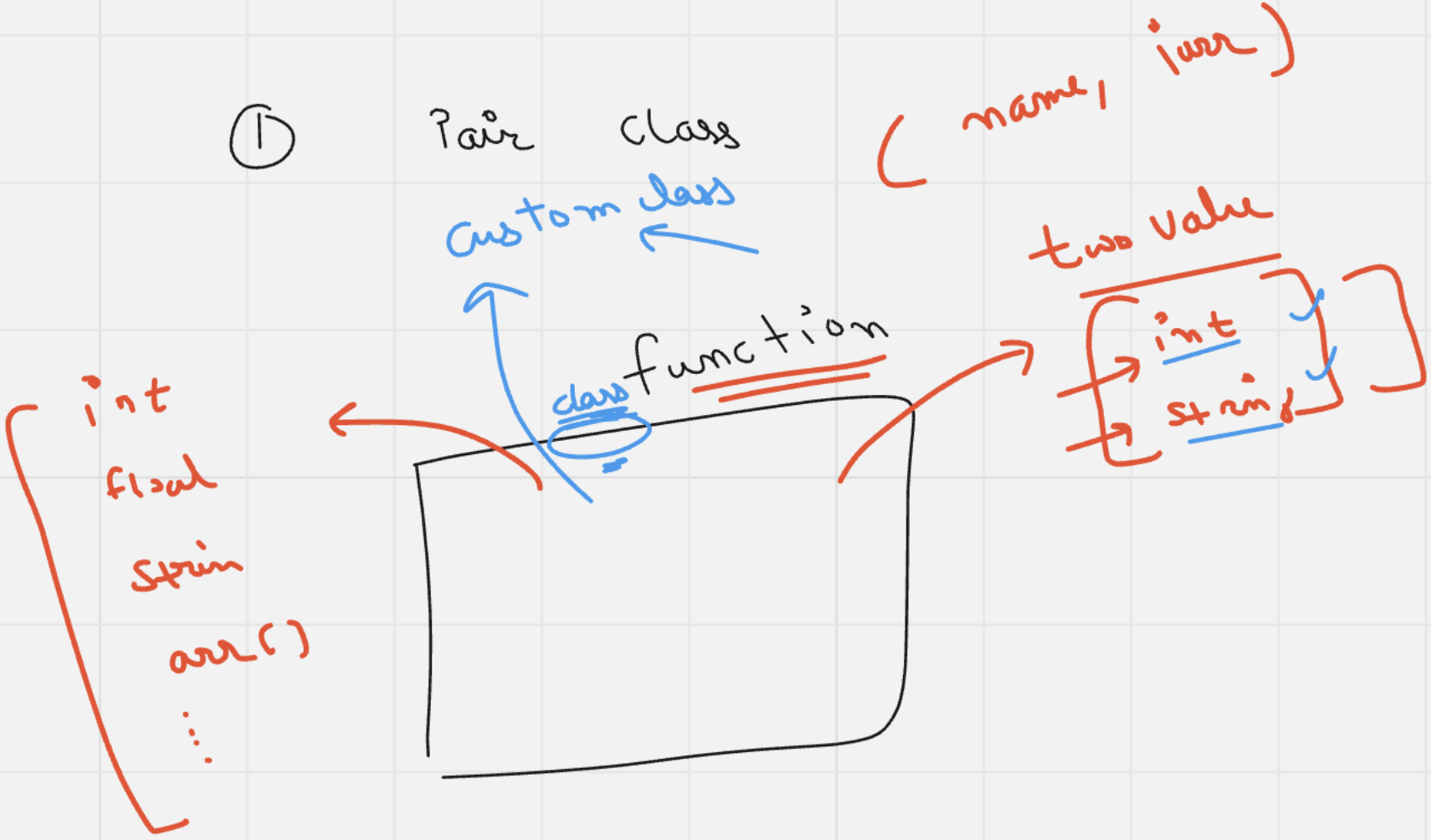
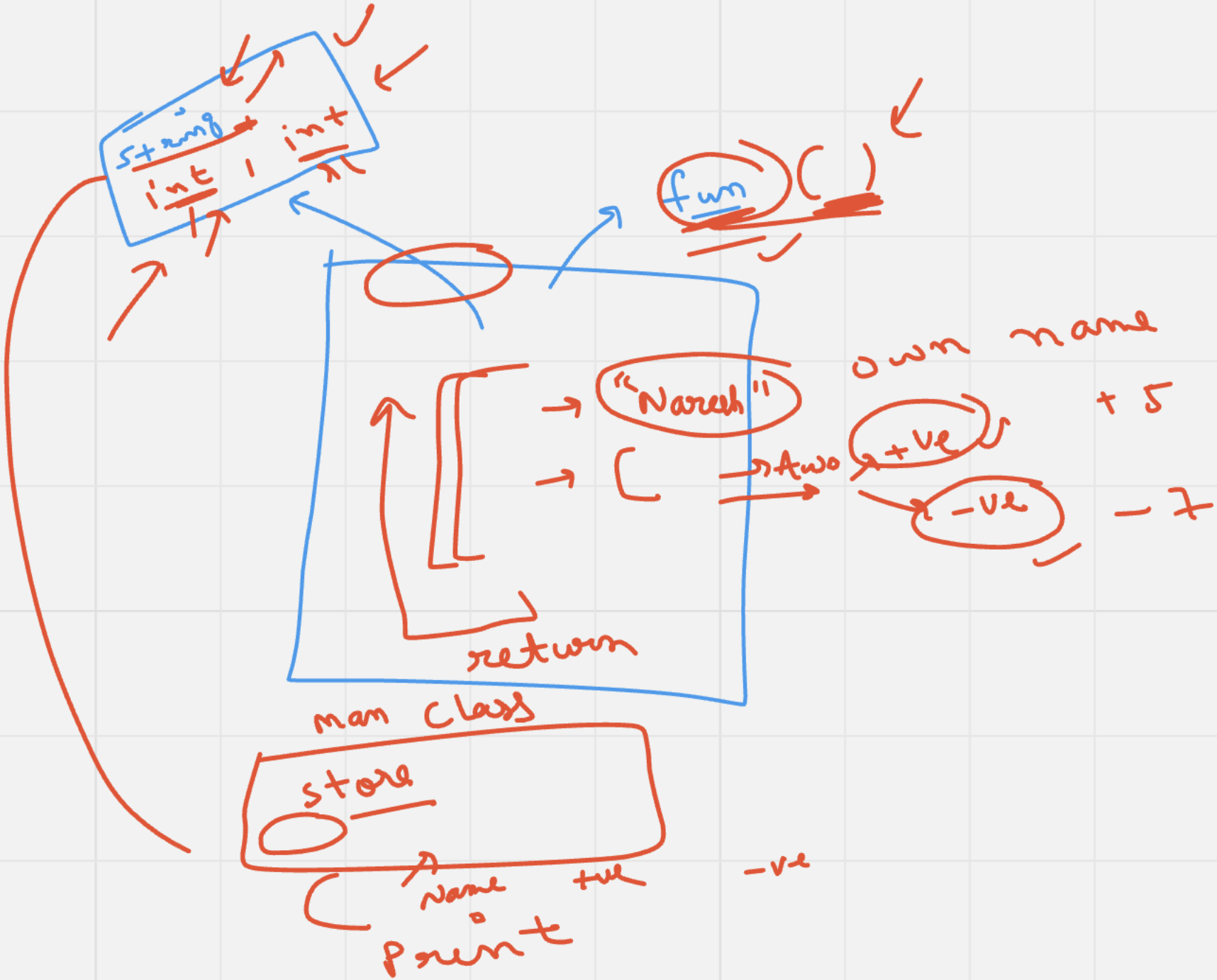
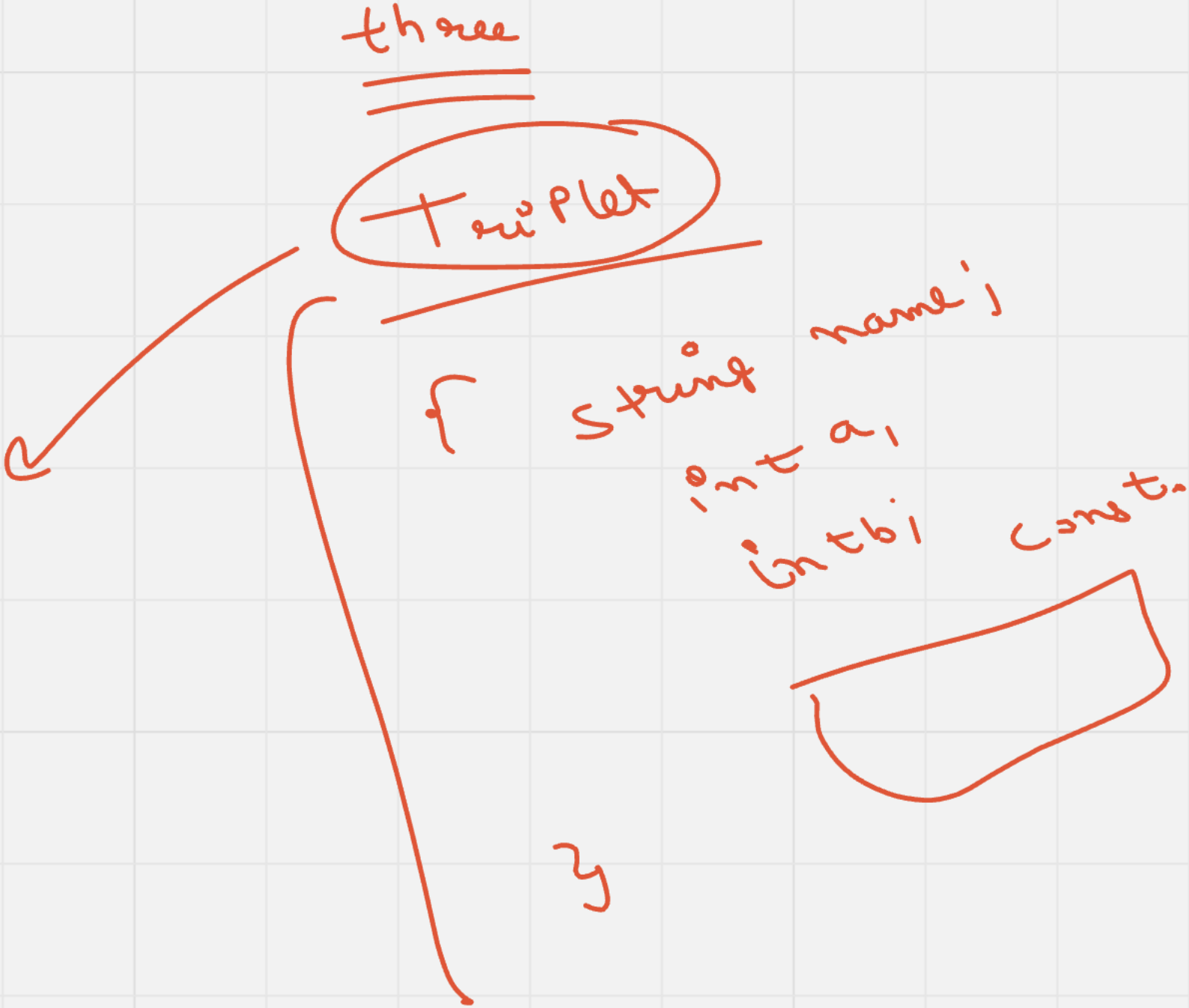
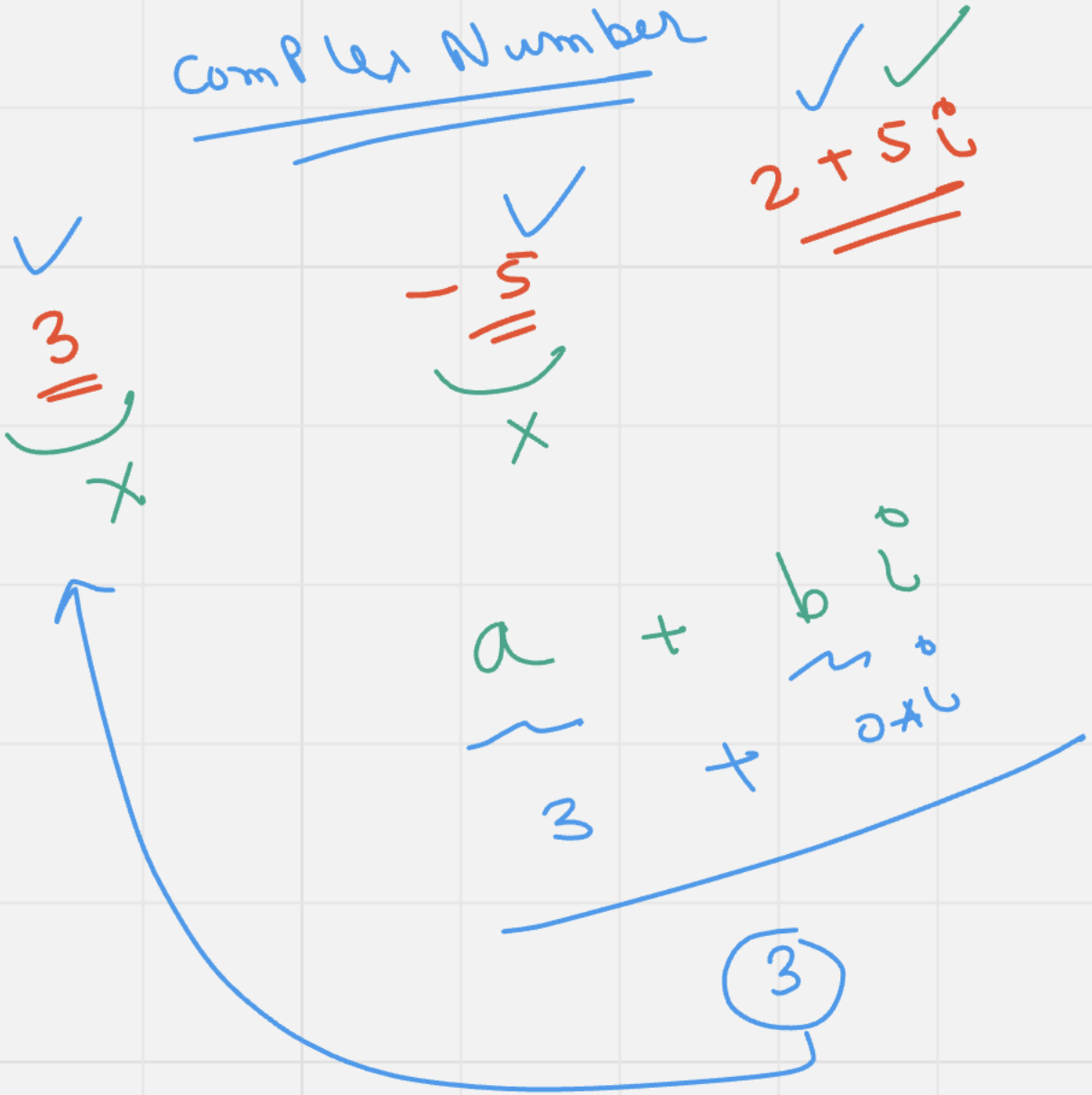
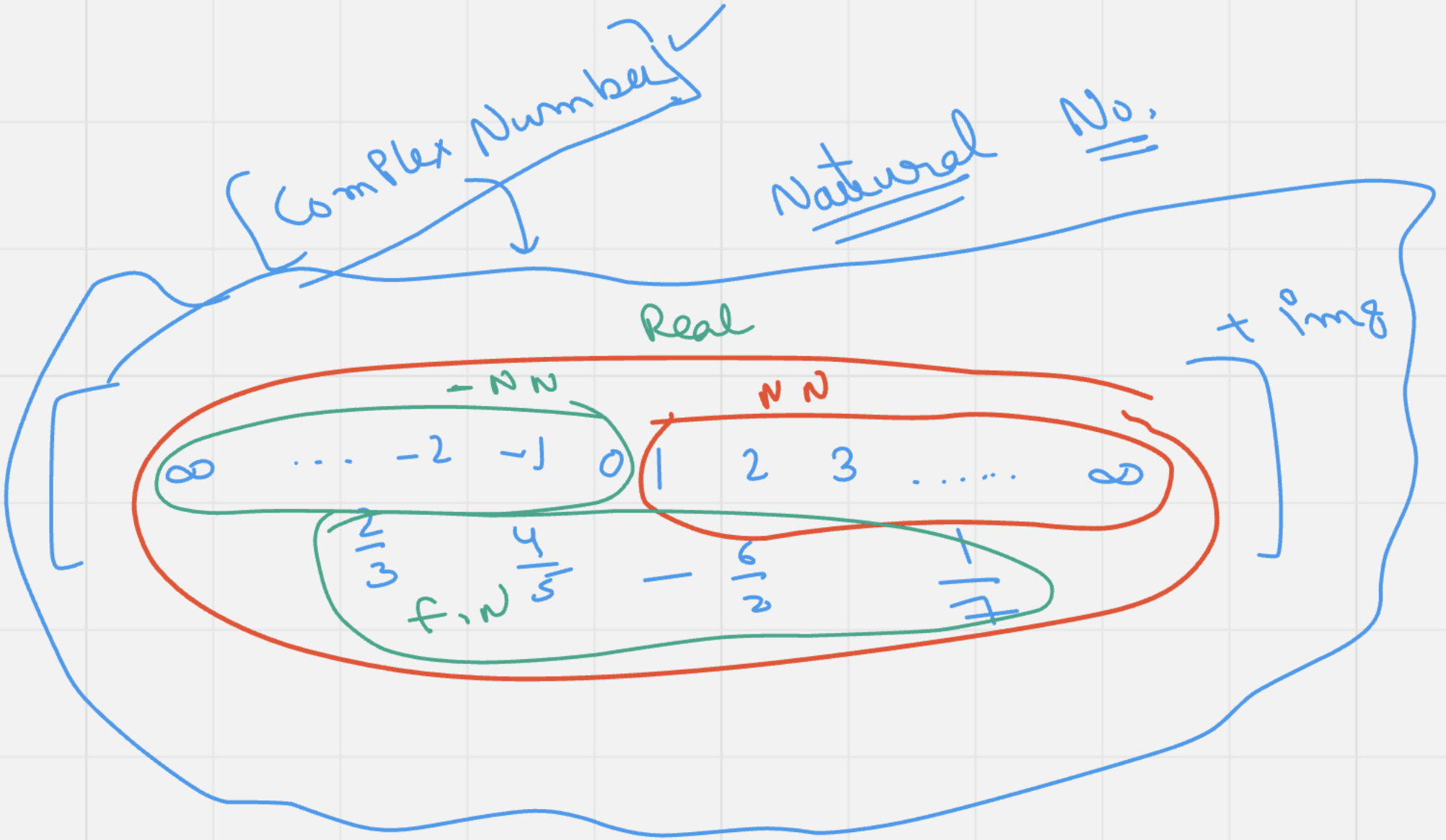
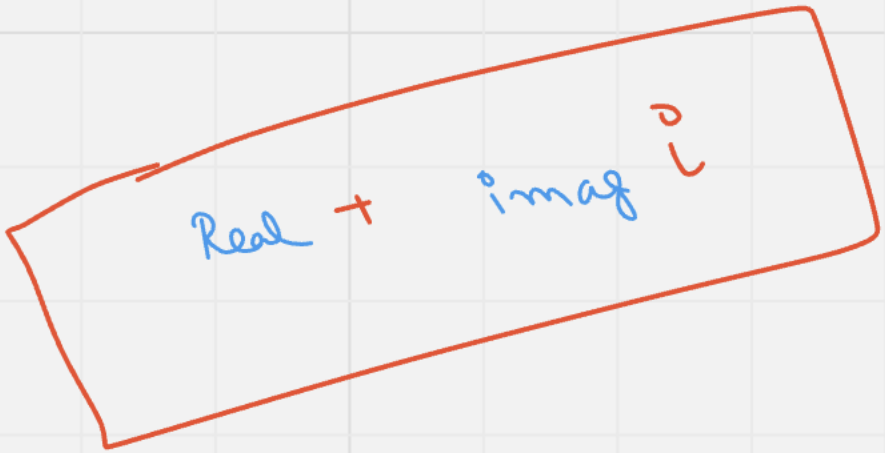

① Pair Class
(name, int)
Custom class
two value
int
string
class function
int
float
string
arr()
...


String
int
int
fun
"Naresh"
own name
+5
+ve
Awo
-ve
-7
return
main Class
store
Name
full
-ve
print

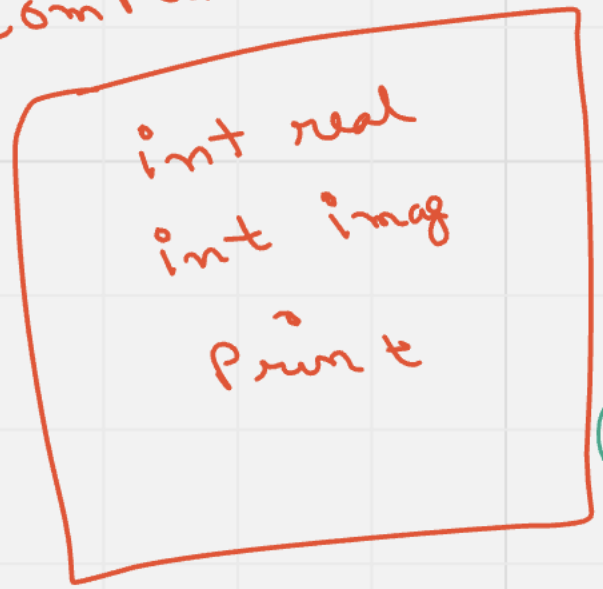

three
Triplet
{ string name;
int a;
int b; const.
};


Complex Number
2 + 5i
-5
3
a + bi
3
3


Complex Number
Natural No.
Real
+ Img
- N N
N N
∞ ... -2 -1 0 1 2 3 ..... ∞
2/3
4/5
f. N
6/2
1/7



Compiler



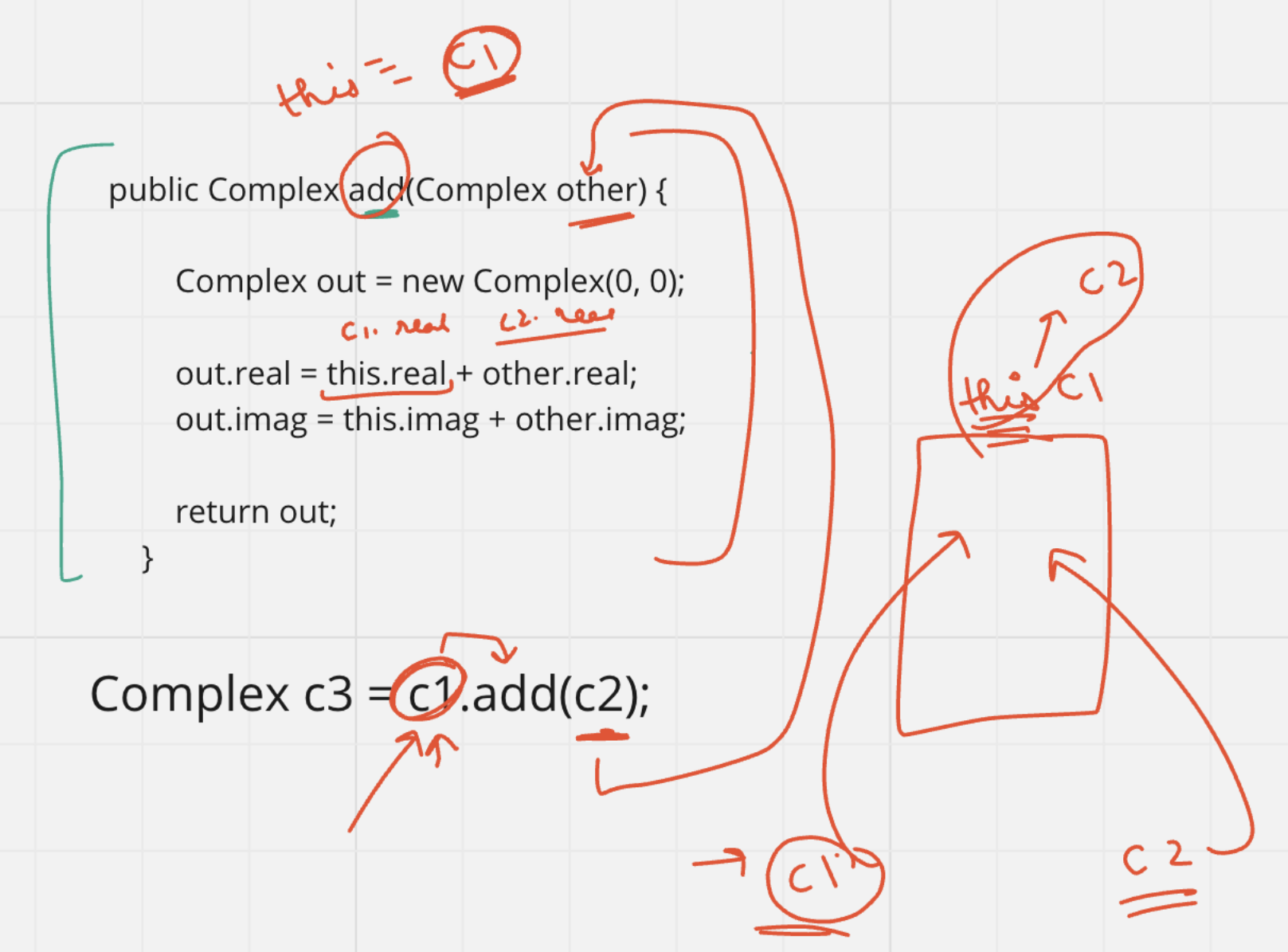
$C1 = 1 + 2i$

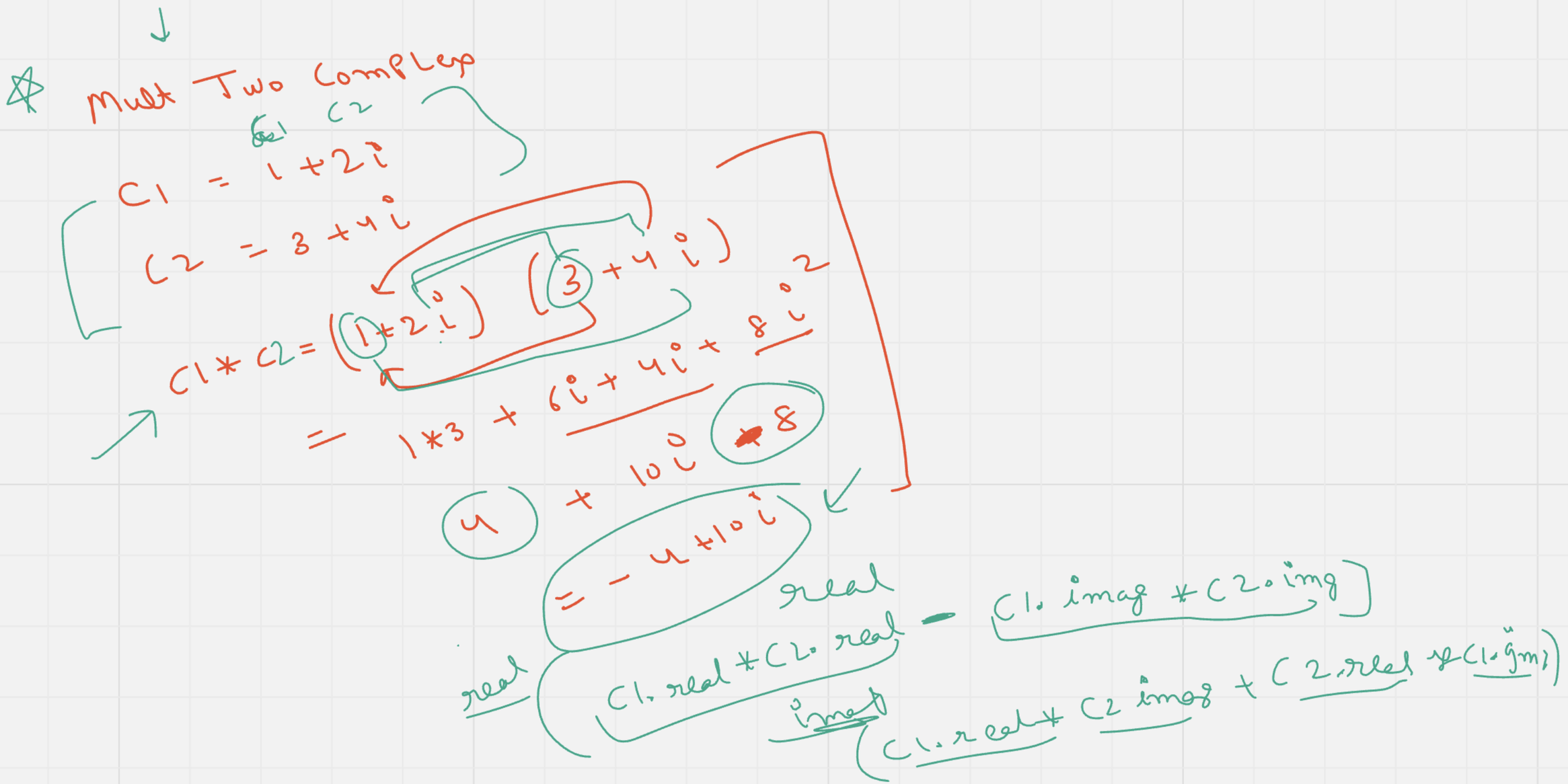
$C2 = 3 + 4i$

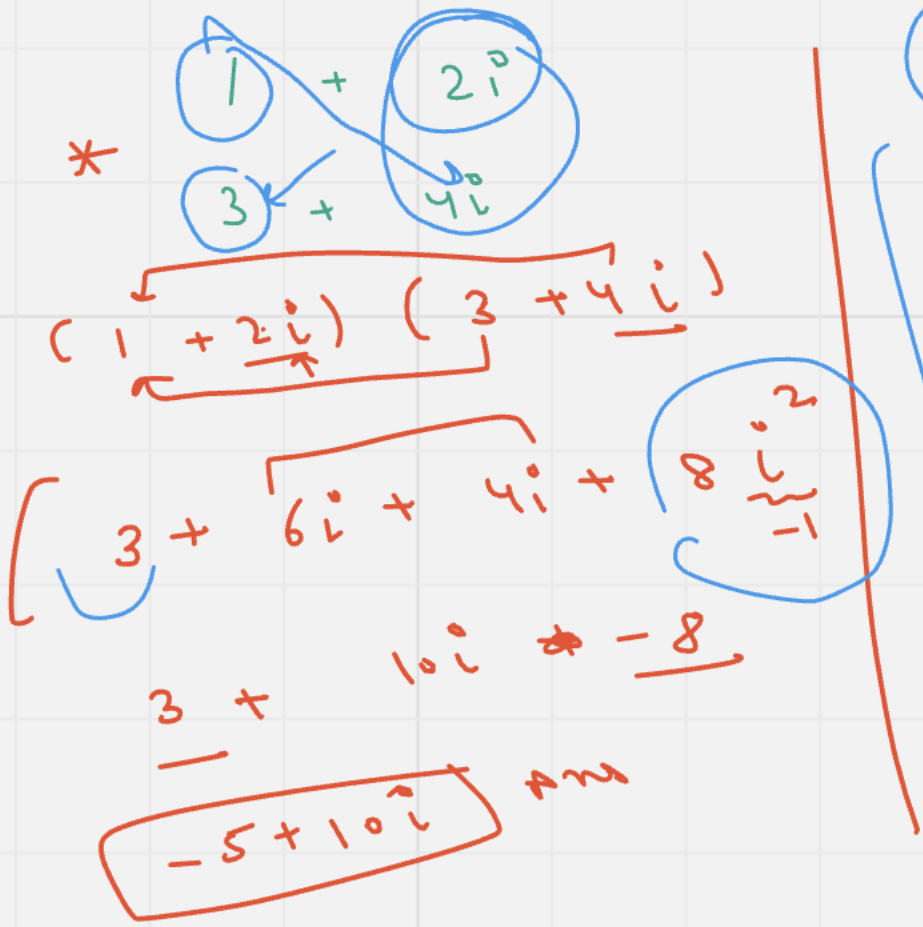
$C3 = C1 + C2 = 4 + 6i$

```
public Complex add(Complex other) {

    Complex out = new Complex(0, 0);

    out.real = this.real + other.real;
    out.imag = this.imag + other.imag;

    return out;
}
```

```
Complex c3 = c1.add(c2);
```




Mult Two Complex
C1 = 1 + 2i
C2 = 3 + 4i
C1 * C2 = (1 + 2i) (3 + 4i)
= 1*3 + 6i + 4i + 8i^2
= 3 + 10i + 8 * -1
= -5 + 10i
real
C1.real * C2.real - C1.imag * C2.img
imag
C1.real + C2 imag + C2.real * C1.img



Real

C1.real * C2.real

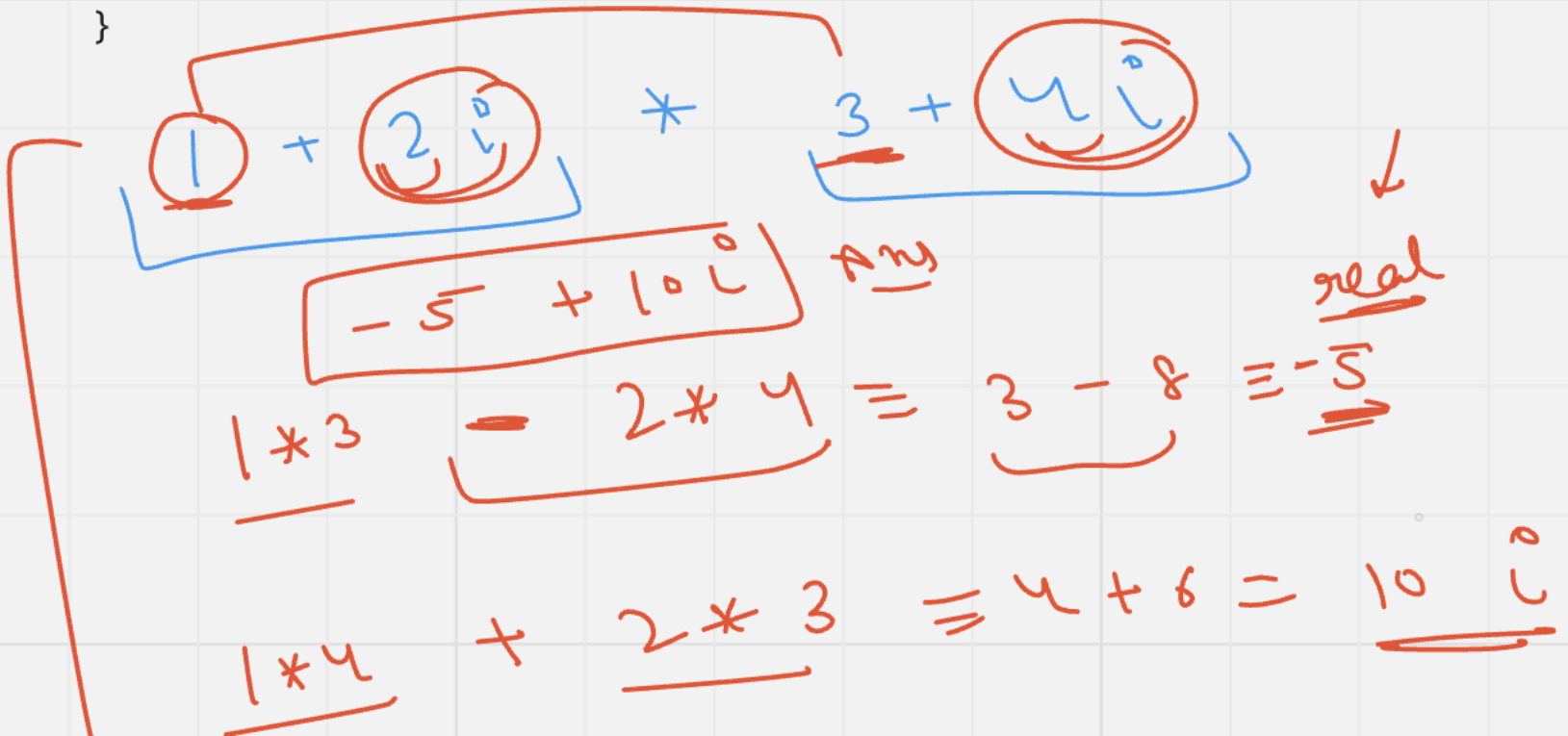
- C1.img * C2.img

Imag

C1.real * C2 imag

+ C1.imag + C2. real

```
public Complex mult(Complex other) {

    Complex out = new Complex(0, 0);

    out.real = this.real * other.real - this.imag * other.imag;
    out.imag = this.real * other.imag + this.imag * other.real;

    return out;
}
```



fraction

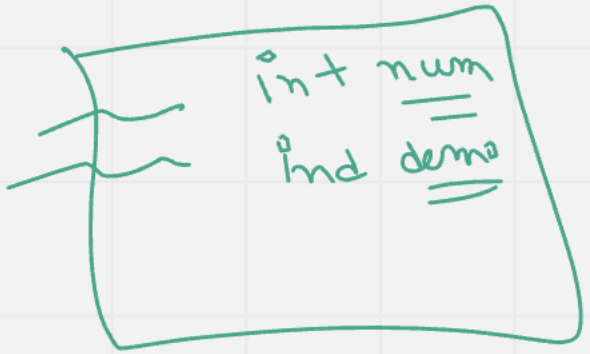
numerator

1/2

3/4

6/7

denominator



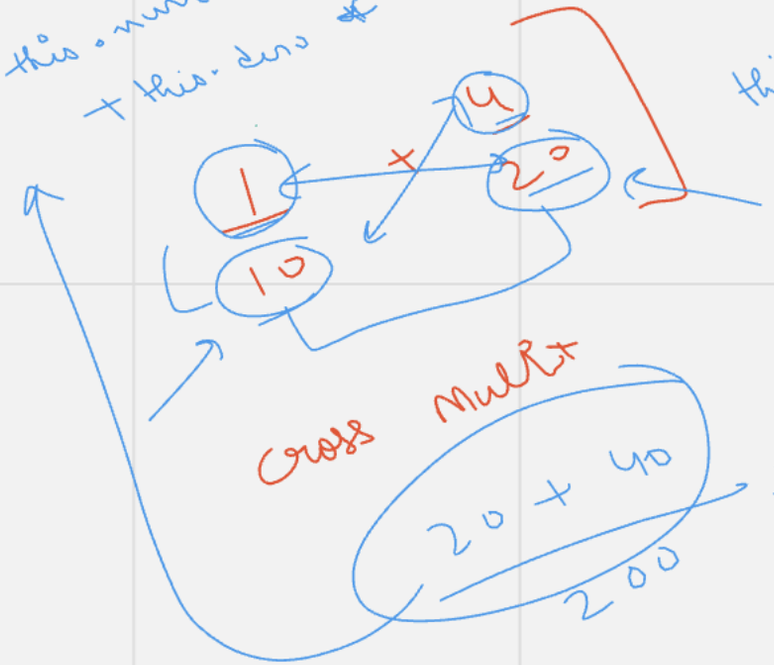
getter

setter

this.num * other.denom

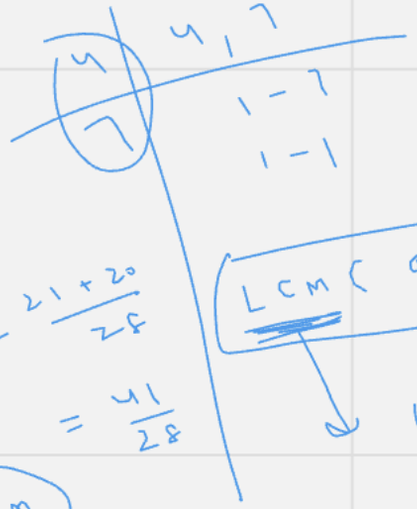
+ this.denom * other.num

this.denom * other.denom



add

$$\frac{3*7 + 5*4}{28} = \frac{21+20}{28} = \frac{41}{28}$$



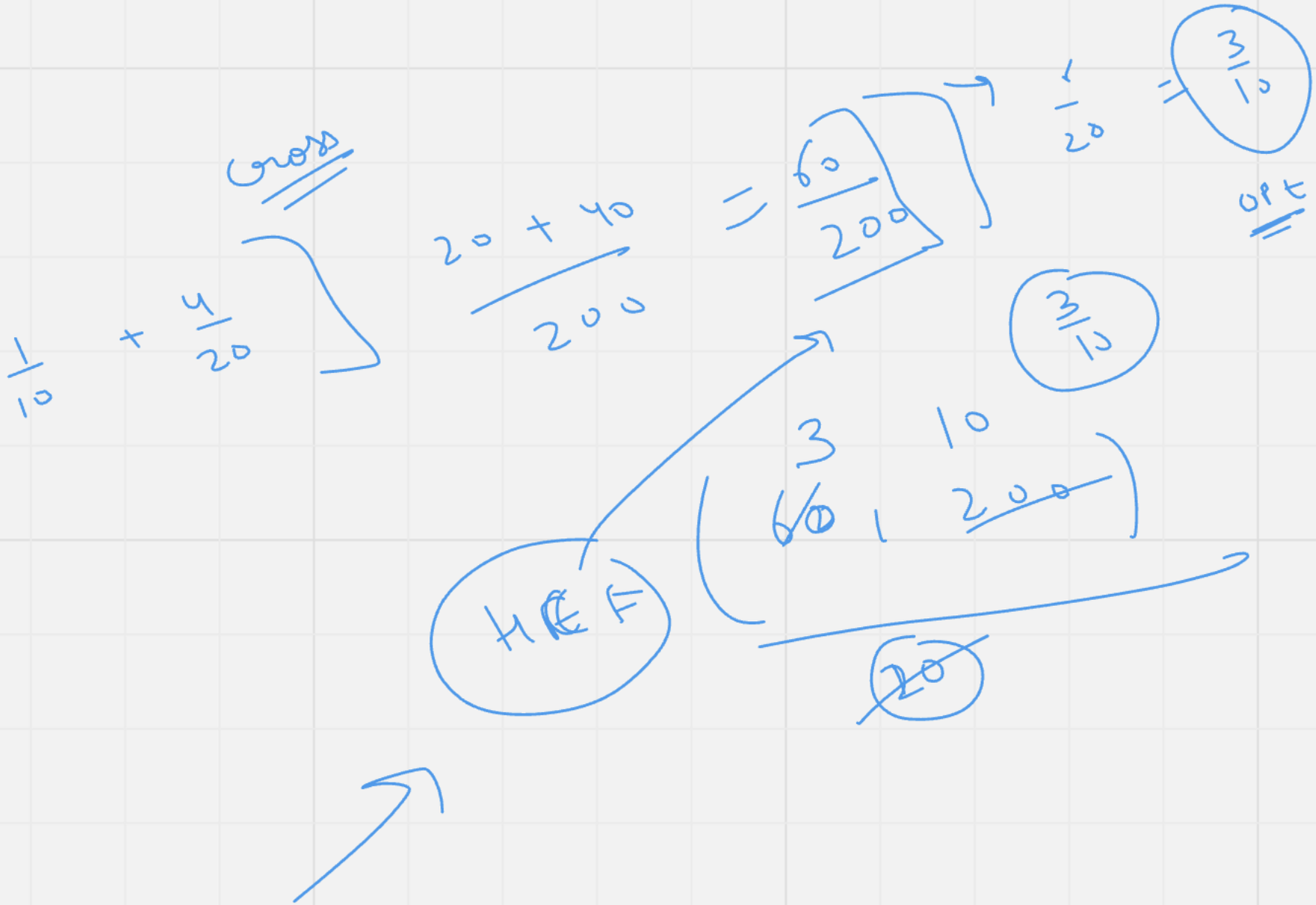
LCM (a , b)

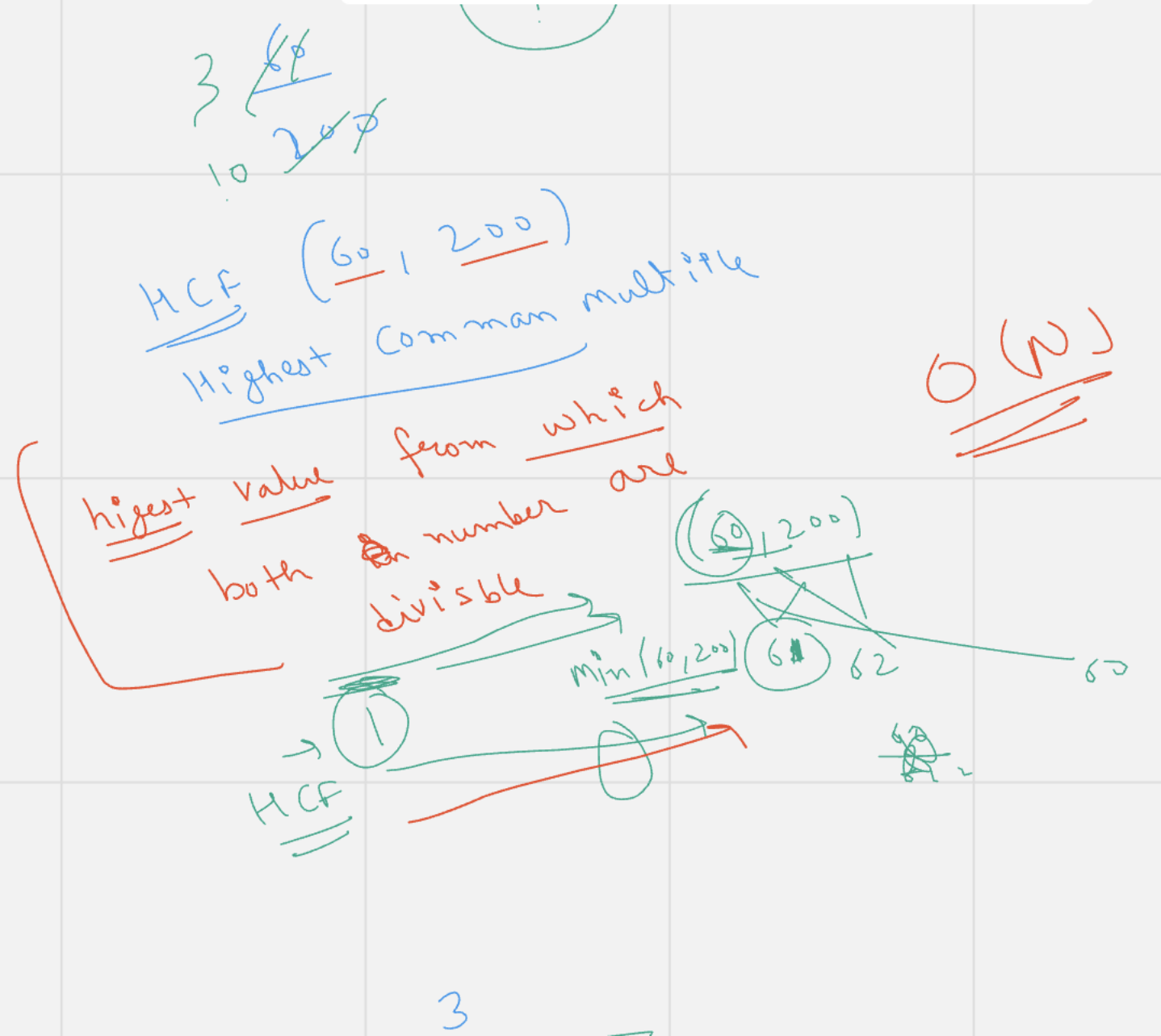
Lowest Com

LCM

HCM (60 , 200)

3/10


Cross
1/10 + 4/20
20 + 40 / 200
= 60/200
1/20
= 3/10
of t
3/10
3 10
60 200
HCF
20


HCF (60, 200)
Highest Comman multiple
O(N)
higest value from which both number are divisble
min(60,200)
HCF