Functions

Find sum using a function

p.s. return type (int / void) fun name (sum) (p1 , p2)

{

return int;

}

$$f(x, y) = x + y$$

Find product of the two numbers using function.

$x = 2$

$y = 3$

p.s.

int product (int A, int B)

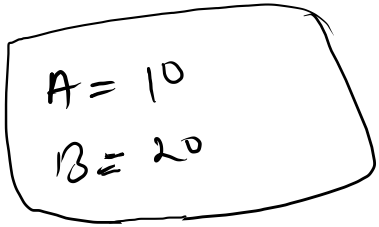
{

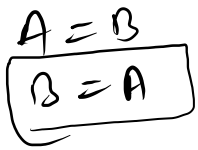
return A * B;

}

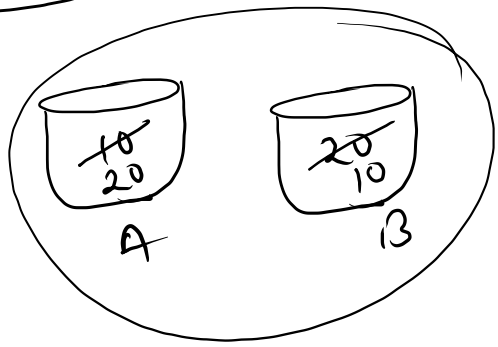
Swap 2 numbers.

↳ Swap 2 no. with help of 3rd no.






```
int C = A;
A = B;
B = C;
```



Area and perimeter as double using function

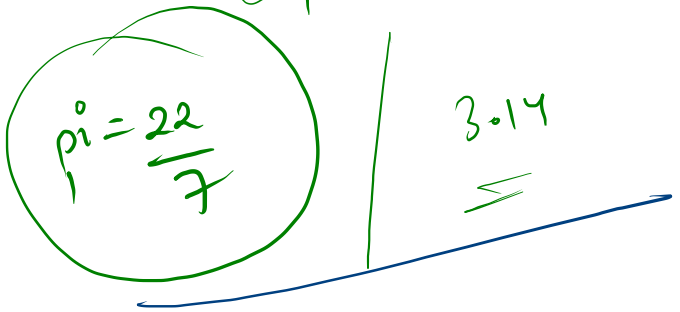
Area = πr^2

perimeter = $2\pi r$

double → decimals.

pi = 22/7

3.14



Swap x y z

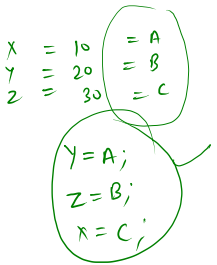
M1 4th variable

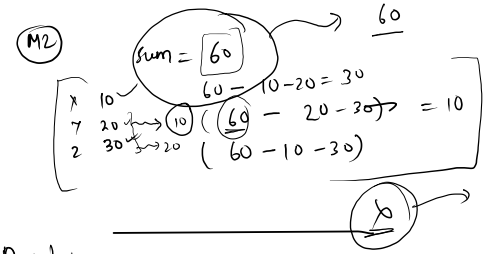
e of x to y, y to z, z to x. The

```
10
20
30
```

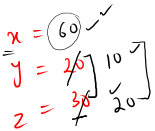
Sample

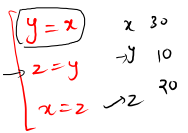
```
30
10
20
```





Print.

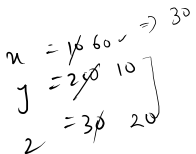




y = x - y - z = 10

z = x - y - z = 60 - 10 - 30 = 20

x = x - y - z = 60 - 10 - 20 = 30



y = x

z = y.

Find GCD 3

x = 100
y = 35

gcd = 5

1 2 3 4 5 6 7 8 9 10
11 ——— 35

x = 100
y = 20

gcd = 1 2 4 5 10 20

2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
17 18 19 20 21 > 20

if x → x
y → y

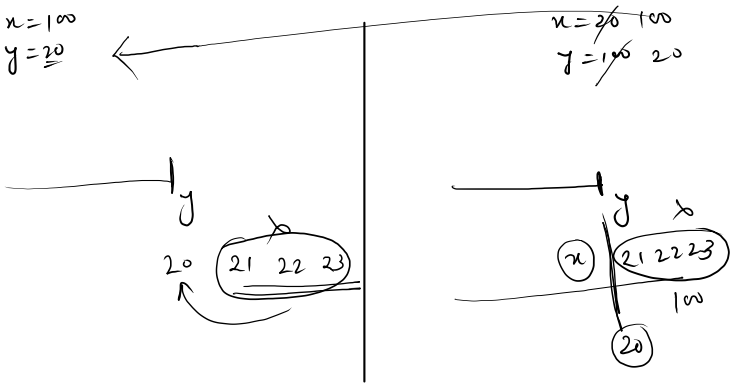
x = 100
y = 35 | y

x = 35
y = 100 | x

x as greater always

y > x ⇒ True.
↓
swap.
↳ x > y ✓✓ True.

y.



case 1

$x = 9$

$y = 6$

```
Scanner scn = new Scanner(System.in);
int x = scn.nextInt();
int y = scn.nextInt();

int gcd = 1;

if(y > x){
    int temp = x;
    x = y;
    y = temp;
}

//Conclude: X is always greater than

for(int i = 2; i <= y; i++){
    if(x % i == 0 && y % i == 0){
        gcd = i;
    }
}
System.out.println(gcd);
```