 1. What is the result of 10 + '5’?

let a=10;

let b="5";

console.log(a+b);

105

 2.⁠ ⁠What is the value of x after x = 10; x += 5;?

let x=10;

x+=5; //x=x+5

console.log(x)

15

 3.⁠ ⁠What is the result of 10 - null?

let a=10;

let b=null;

console.log(a-b);

10

 4.⁠ ⁠What is the value of x after x = 10; x \*= 2;?

let x=10;

x\*=2; // x=x\*2

console.log(x)

20

 5.⁠ ⁠What is the result of 10 / '2'?

let a=10;

let b="2";

console.log(a/b);

5

 6.⁠ ⁠What is the result of 10 % 3?

let a=10;

let b=3;

console.log(a%b);

1

 7.⁠ ⁠What is the value of x after x = 10; x = x \*\* 2;?

let x=10;

x=x\*\*2;

console.log(x);

100

 8.⁠ ⁠What is the result of 10 > 5 && 5 < 10?

console.log(10>5&&5<10);

true

 9.⁠ ⁠What is the result of 10 === '10'?

let a=10;

let b="10";

console.log(a===b);

false

10.⁠ ⁠What is the result of null ?? 'default'?

console.log(null??'default');

default

11.⁠ ⁠What is the result of 10 || 'default'?

let a=10;

console.log(a||'default');

10

12.⁠ ⁠What is the result of !true?

let a=!true;

console.log(a)

false

13.⁠ ⁠What is the result of 10 & 5?

let a=10;

let b=5;

console.log(a&b);

//because we used only single & this a and b converts the given number into binary numbers and performs and operations

0

14.⁠ ⁠What is the result of 10 | 5?

let a=10;

let b=5;

console.log(10|5);

//same like before it will converts normal numbers to binary numbers and performs or operator we get `1111` in decimal `1111` means 15.

15

15.⁠ ⁠What is the result of 10 ^ 5?

let a=10;

let b=5;

console.log(10^5);

//same like before it will converts normal numbers to binary numbers and performs xor operator we get `1111` in decimal `1111` means 15.

15.

16. What is the result of x = 10; y = ++x;? What are the values of x and y?

let x=10;

let y=++x; // pre increment

console.log(x,y)

11,11.

17. ⁠ ⁠What is the result of x = 10; y = x++;? What are the values of x and y?

let x=10;

let y=x++; //post increment

console.log(x,y)

11,10

18.  3.⁠ ⁠What is the result of x = 10; console.log(++x);?

let x=10;

console.log(++x);

11

19.  4.⁠ ⁠What is the result of x = 10; console.log(x++);?

let x=10;

console.log(x++);

10

20. 5.⁠ ⁠What is the result of x = 10; y = --x;? What are the values of x and y?

let x=10;

let y=--x; //pre decriment

console.log(x,y);

9,9

21.  6.⁠ ⁠What is the result of x = 10; y = x--;? What are the values of x and y?

let x=10;

let y=x--;

console.log(x,y);

9,10.

Ternary operator:

 1.⁠ ⁠What is the result of x = 10; y = x > 5 ? 'yes' : 'no';? What is the value of y?

let x=10;

let y=x>5? true:false;

console.log(y);

true

 2.⁠ ⁠What is the result of x = 10; y = x > 5 ? 'yes' : x > 3 ? 'maybe' : 'no';? What is the value of y?

let x=10;

let y=x>5?'yes':x>3? 'maybe':'no';

console.log(y);

yes.

Optional-chaining:

 1.⁠ ⁠What is the result of const obj = { a: { b: 'c' } }; console.log(obj?.a?.b);?

const obj = { a: { b: 'c' } };

console.log(obj?.a?.b);

c

 2.⁠ ⁠What is the result of const obj = { a: { b: 'c' } }; console.log(obj?.a?.c);?

const obj={a:{b:'c'}};

console.log(obj?.a?.c);

Undefined.

 3.⁠ ⁠What is the result of const obj = { a: { b: 'c' } }; console.log(obj?.b?.c);?

const obj={a:{b:'c'}};

console.log(obj?.b?.c);

Undefined

Nullish Chaining:

 1.⁠ ⁠What is the result of x = null; y = x ?? 'default';? What is the value of y?

let x=null;

y=x??"default";

console.log(y);

default

 2.⁠ ⁠What is the result of x = undefined; y = x ?? 'default';? What is the value of y?

let x=undefined;

y=x??"default";

console.log(y);

default

3.⁠ ⁠What is the result of x = 0; y = x ?? 'default';? What is the value of y?

let x=0;

y=x??"default";

console.log(y);

0