**MCQ 1:** Which operator in Java is used to test if two primitive values are equal?
(a) =
(b) ==
(c) !=
(d) equals

---

**MCQ 2:** Which relational operator checks if the left operand is greater than the right operand?
(a) >
(b) < (c) >=
(d) <=

---

**MCQ 3:** Which operator is used to check if two operands are not equal in Java?
(a) <>
(b) !=
(c) ~==
(d) !==

---

**MCQ 4:** What is the correct operator to check if one value is less than or equal to another?
(a) <=
(b) =< (c) <==
(d) =<=

---

**MCQ 5:** Which relational operator checks if one value is greater than or equal to another?
(a) >=
(b) =>
(c) >
(d) <

---

**MCQ 6:** Which unary operator increments a variable’s value by one?
(a) --
(b) ++
(c) +
(d) +=

---

**MCQ 7:** Which unary operator decrements a variable’s value by one?
(a) --
(b) ++
(c) -
(d) -=

---

**MCQ 8:** What is the main difference between the pre-increment (++x) and post-increment (x++) operators?
(a) Pre-increment increments after the value is used, post-increment increments before.
(b) Pre-increment increments before the value is used, post-increment increments after.
(c) They both increment at the same time.
(d) Only pre-increment is valid in Java.

---

**MCQ 9:** Which unary operator in Java is used to negate a boolean value?
(a) -
(b) ! (c) ~ (d) not

---

**MCQ 10:** Which operator returns the original value before performing the increment?
(a) Pre-increment (++x)
(b) Post-increment (x++)
(c) Both return the same value
(d) Neither; they both return the new value

---

**MCQ 11:** Which unary operators are not applicable to boolean types in Java?
(a) ! (b) ++
(c) --
(d) Both ++ and --

---

**MCQ 12:** What does the unary minus operator do to a numeric expression?
(a) Converts a positive number to a negative number
(b) Increments the number
(c) Decrements the number
(d) Leaves the number unchanged

---

**MCQ 13:** Which of the following is a valid use of a unary operator in Java?
(a) `int a = -5;`
(b) `int a = ++-5;`
(c) `int a = !5;`
(d) `int a = --+5;`

---

**MCQ 14:** What does the expression `x++` do in Java?
(a) Increments `x` and returns the new value
(b) Increments `x` but returns the original value
(c) Decrements `x` and returns the original value
(d) Leaves `x` unchanged

---

**MCQ 15:** What does the expression `--y` do in Java?
(a) Returns `y` then decrements it
(b) Decrements `y` and returns the new value
(c) Increments `y` and returns the new value
(d) Returns `y` then increments it

---

**MCQ 16:** Which operator is used to get the bitwise complement of a number’s bits?
(a) ! (b) ~ (c) -
(d) ++

---

**MCQ 17:** If `x` is 5, what value does the expression `++x` yield when used in an expression context?
(a) 5
(b) 6
(c) 4
(d) Undefined

---

**MCQ 18:** If `x` is 5, what value does the expression `x++` yield when used in an expression context?
(a) 5
(b) 6
(c) 7
(d) 4

---

**MCQ 19:** Which of the following statements is true regarding operator overloading in Java?
(a) The '+' operator can be overloaded
(b) The '-' operator can be overloaded
(c) The '++' operator can be overloaded
(d) None of the unary operators can be overloaded

---

**MCQ 20:** Which of the following is **not** considered a relational operator in Java?
(a) ==
(b) !=
(c) ++
(d) <=

---

**MCQ 21:** In the statement `if(a != b)`, what is being tested?
(a) Whether `a` is equal to `b`
(b) Whether `a` is not equal to `b`
(c) Whether `a` is greater than `b`
(d) Whether `a` is less than `b`

---

**MCQ 22:** Which relational operator would you use to compare the order of two numeric values?
(a) =
(b) >
(c) ==
(d) All of the above

---

**MCQ 23:** What is the result of evaluating the expression `7 < 10` in Java?
(a) 7
(b) 10
(c) true
(d) false

---

**MCQ 24:** Among the following, which group of operators has the highest precedence in Java?
(a) Unary operators (e.g., ++, --, -)
(b) Relational operators (e.g., <, >, ==)
(c) Logical AND operator
(d) Logical OR operator

---

**MCQ 25:** Which of the following demonstrates the proper use of a unary operator on a boolean variable?
(a) `boolean flag = true; flag = -flag;`
(b) `boolean flag = true; flag = !flag;`
(c) `boolean flag = true; flag = ++flag;`
(d) `boolean flag = true; flag = --flag;`

---

**MCQ 26:** In the expression `++a + a++`, which of the following statements best describes the order of operations?
(a) Both increments occur before the addition
(b) The first increment occurs before addition and the second after
(c) The first increment occurs after addition and the second before
(d) Both increments occur after the addition

---

**MCQ 27:** Which unary operator produces the negative of a numeric expression?
(a) +
(b) -
(c) ! (d) ++

---

**MCQ 28:** If `a` is 10, what does the expression `a--` do?
(a) Returns 10 then decrements `a` to 9
(b) Returns 9 then decrements `a` to 8
(c) Returns 10 then increments `a`
(d) Returns 9 then increments `a`

---

**MCQ 29:** Which of the following data types cannot be used with the unary increment (++) and decrement (--) operators in Java?
(a) float
(b) int
(c) char
(d) boolean

---

**MCQ 30:** Which of the following expressions correctly demonstrates the use of the unary minus operator in Java?
(a) `int result = -5;`
(b) `int result = --5;`
(c) `int result = 5 -;`
(d) `int result = +5 -;`

# Coding

**MCQ 1:**

```
int x = 10;
int y = x++;
System.out.println(x);
```

What is the output?
(a) 10
(b) 11
(c) 12
(d) 9

---

**MCQ 2:**

```
int a = 5;
int b = ++a;
System.out.println(b);
```

What does this code print?
(a) 5
(b) 6
(c) 7
(d) Compilation error

---

**MCQ 3:**

```
int a = 5;
int b = a++;
System.out.println(b);
```

What is the output?
(a) 5
(b) 6
(c) 7
(d) Runtime error

---

**MCQ 4:**

```
int a = 3;
System.out.println(-a);
```

What value is printed?
(a) 3
(b) -3
(c) 0
(d) Compilation error

---

**MCQ 5:**

```
int x = 4;
System.out.println(++x + x++);
```

What is the result of this expression?
(a) 9
(b) 10
(c) 11
(d) 8

---

**MCQ 6:**

```
int a = 10, b = 10;
System.out.println(a == b);
```

What does this print?
(a) true
(b) false
(c) 0
(d) Compilation error

---

**MCQ 7:**

```
int a = 7, b = 9;
System.out.println(a != b);
```

What is the output?
(a) true
(b) false
(c) 7
(d) Compilation error

---

**MCQ 8:**

```
int x = 8;
System.out.println(x--);
```

What is printed by this statement?
(a) 7
(b) 8
(c) 9
(d) Runtime error

---

**MCQ 9:**

```
int x = 8;
System.out.println(--x);
```

What value does this print?
(a) 7
(b) 8
(c) 9
(d) Compilation error

---

**MCQ 10:**

```
int x = 5;
int y = x;
System.out.println(++x == y++);
```

What is the output of this expression?
(a) true
(b) false
(c) 5
(d) Compilation error

---

**MCQ 11:**

```
int a = 10;
int b = 5;
System.out.println(a >= b);
```

What does the code print?
(a) true
(b) false

(c) 10
(d) 5

---

**MCQ 12:**

```
int a = 10;
int b = 10;
System.out.println(a <= b);
```

What is the output?
(a) true
(b) false
(c) 10
(d) 0

---

**MCQ 13:**

```
int a = 15;
System.out.println(a == 15);
```

What does this print?
(a) true
(b) false
(c) 15
(d) Compilation error

---

**MCQ 14:**

```
int a = -5;
System.out.println(-a);
```

What is the output of this code?
(a) -5
(b) 5
(c) 0
(d) Runtime error

---

**MCQ 15:**

```
int x = 0;
x++;
System.out.println(x);
```

What value is printed?
(a) 0
(b) 1
(c) 2
(d) Compilation error

---

**MCQ 16:**

```
int x = 0;
++x;
```

```
System.out.println(x);
```

What is the output?
(a) 0
(b) 1
(c) 2
(d) Error

---

**MCQ 17:**

```
int a = 3;
int b = a++;
int c = ++a;
System.out.println(a + b + c);
```

What is the sum printed?
(a) 11
(b) 12
(c) 13
(d) 14

---

**MCQ 18:**

```
int x = 7;
System.out.println(x > 5);
```

What does this code print?
(a) true
(b) false
(c) 7
(d) Compilation error

---

**MCQ 19:**

```
int x = 7;
System.out.println(x < 7);
```

What is the output?
(a) true
(b) false
(c) 0
(d) Runtime error

---

**MCQ 20:**

```
int x = 7;
System.out.println(x == 7);
```

What does this print?
(a) true
(b) false
(c) 7
(d) Compilation error