

Testing Mentor Quick-Cue™

C# Operators

Arithmetic Operators

```
// Addition
int i = 5 + 6;
// Subtraction
int i = 6 - 5;
// Multiplication
int i = 2 * 3;
// Division
int i = 6 / 2;
// Modulus - computes remainder
// after dividing operands
int i = 6 % 2; // i = 0
int i = 5 % 2; // i = 1
```

Relational Operators

```
// Equality
if ( i == 0 )
// Inequality
if ( i != 0 )
if ! ( i > 0 )
// Greater than
if ( i > 0 )
// Greater than or equal to
if ( i >= 0 )
// Less than
if ( i < 0 )
// Less than or equal to
if ( i <= 0 )
```

Assignment Operators

```
// Simple assignment
int i = 5;
// Addition assignment
int i = 5;
i += 6; // i = 11
// Subtraction assignment
int i = 6;
i -= 5; // i = 1
// Multiplication assignment
int i = 5;
i *= 5; // i = 25
// Division assignment
int i = 6;
i /= 2; // i = 3
```

Incremental Operators

```
// Increment by 1
int i = 1;
i ++; // i = 2
// Decrement by 1
int i = 1;
i --; // i = 0
```

Casting Operator

```
double d = 1.9;
int i = (int)d; // i = 1
```

Logical Operators

```
// Logical AND of Boolean
conditions;
if ( a == b ) && ( b == c )
{
    // Enter block only if both
    // conditions are true
}
// Logical OR of Boolean conditions
if ( a == b ) || ( b == c )
{
    // Enter block if either
    // condition is true
}
```

Conditional Operator

```
// returns result based on outcome
// of the Boolean clause
int i = 10;
i = 5 != 6 ? i++ : i--; // i = 9
// is programmatically the same as
int i = 10;
if ( 5 != 6 )
{
    i ++;
}
else
{
    i --;
}
```