

Subtraction

Subtraction

```
int a = 10;  
int b = 3;  
int c = a - b;  
System.out.println(c);
```

TRY IT

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What happens if you:

- Change `b` to `-3`?
- Change `c` to `c = a - -b`?
- Change `b` to `3.0`?

TRY IT

```
code/operators/PlaygroundSubtraction.java:7: error:  
incompatible types: possible lossy conversion from double  
to int
```

```
    int b = 3.0;  
           ^
```

1 error

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The `--` and `--=` Operators

Decrementing is the opposite of incrementing. Just like you can increment with `++`, you can decrement using `--`.

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

Like `+=`, there is a shorthand for decrementing a variable - `--`.

TRY IT

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Subtraction and Strings

You might be able to concatenate strings with the `+` operator, but you cannot use the `-` operator with them.

```
String a = "one two three";  
String b = "one";  
String c = a - b;  
System.out.println(c);
```

TRY IT

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Decrementing

Use the fewest characters possible to complete the code as described.

```
int a = 42;  
int b = 2;  
//decrement a by 1  
a--;  
//decrement a by b  
a-=b;
```

```
int a = 42;  
int b = 2;  
//decrement a by 1  
a--;  
//decrement a by b  
a-=b;
```

To decrement by 1, you use the `--` operator. To decrement or subtract by any other number, you use `-=`.