# Unit 1—Lesson 3: Operators

### Assign a value

Use the = operator to assign a value

```
var favoritePerson = "Luke"
```

Use the = operator to modify or reassign a value

```
var shoeSize = 8
shoeSize = 9
```

#### Basic arithmetic

You can use the +, -, \*, and / operators to perform basic math functions

```
var opponentScore = 3 * 8
var myScore = 100 / 4
```

You can also use the value of other variables

```
var totalScore = opponentScore + myScore
```

Or you can use the current variable you're updating

```
myScore = myScore + 3
```

### Basic arithmetic

#### Use Double values for decimal point precision

```
let totalDistance = 3.9
var distanceTravelled = 1.2
var remainingDistance = totalDistance - distanceTravelled
print(remainingDistance)
```

2.7

### Basic arithmetic

12

```
let x = 51
let y = 4
let z = x / y
print(z)
```

# Basic arithmetic Using Double values

```
let x: Double = 51
let y: Double = 4
let z = x / y
print(z)
```

12.75

### Compound assignment

```
var myScore = 10
myScore = myScore + 3

myScore += 3
myScore -= 5
myScore *= 2
myScore /= 2
```

### Order of operations

17

25

```
3. + -

var x = 2

var y = 3

var z = 5

print(x + y * z)

print((x + y) * z)
```

### Numeric type conversion

```
let x = 3
let y = 0.1415927
let pi = x + y
```

Binary operator '+' cannot be applied to operands of type 'Int' and 'Double'

## Numeric type conversion

```
let x = 3
let y = 0.1415927
let pi = Double(x) + y
```

3.1415927

# Unit 1—Lesson 3 Lab: Operators



Open and complete the exercises in Lab-Operators.playground