

# 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

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

12

# 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

1. ( )
2. \* /
3. + -

```
var x = 2
var y = 3
var z = 5
print(x + y * z)
print((x + y) * z)
```

17

25



# 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
```

# Unit 1—Lesson 3

## Lab: Operators



Open and complete the exercises in `Lab-Operators.playground`

