# Floats

Let's take a look at another numerical data type in Reason.

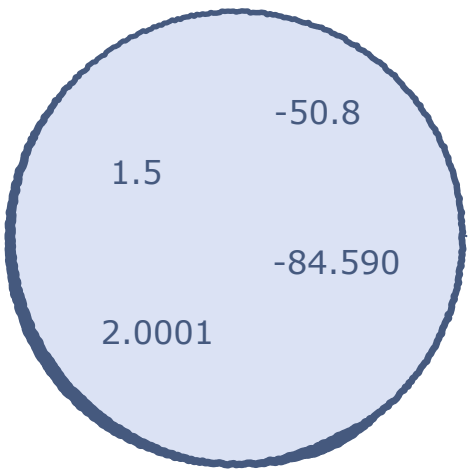
WE'LL COVER THE FOLLOWING



## Definition

> The **float** data type contains positive and negative decimal numbers.

Floats behave very similar to integers, but their storage in memory is different. Although a float also occupies 4 bytes, the bytes represent a decimal rather than a whole number.




The world of floats.

Apart from `Js.log()` (prints in a new line each time) floats can also be printed using `print_float()` (prints in the same line).

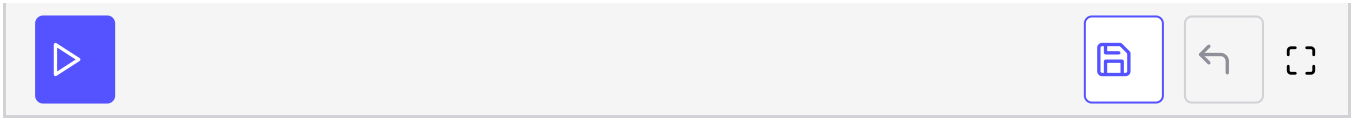
## Arithmetic

## Arithmetic #

In Reason, float arithmetic requires a `.` succeeding every operator. For example, the addition operator, `+`, turns to `+.`.

```
Js.log(8.5 +. 6.0); /* 14.5 */
Js.log(19.63 /. 3.15); /* 6.231746031746032 */
Js.log(19.63 *. 3.15); /* 61.8345 */

/* Alternate method */
print_float(10.5);
```

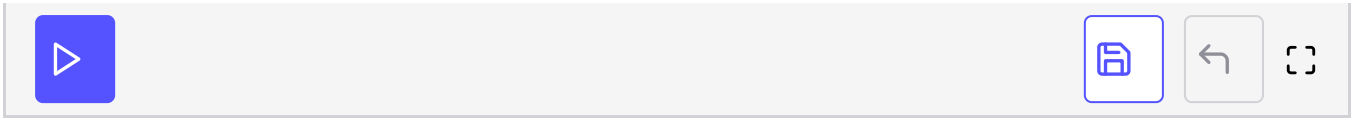


In the code above, we can observe that a float is accurate to several decimal places, especially in the case of division or multiplication.

## Comparison #

The comparison between float values is exactly identical to that of integers.

```
Js.log(14.8 > 6.1); /* true */
Js.log(1.23456 >= 1.23456); /* true */
Js.log(1.23456 == 1.234567); /* false */
```



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That's it for our discussion on numerical data types. Next, we'll look at the **character** data type.