

Equality

We shall contemplate truth by testing reality, via equality

```
(= true true)
```

Equality

To understand reality, we must compare our expectations against reality

```
(= 2 (+ 1 1))
```

Equality

You can test equality of many things

```
(= (+ 3 4) 7 (+ 2 5))
```

Equality

But you may not string yourself along

```
(= false (= 2 "2"))
```

Equality

Something is not equal to nothing

```
(= true (not (= 1 nil)))
```

Equality

Strings, and keywords, and symbols: oh my!

```
(= false (= "foo" :foo 'foo))
```

You have not yet attained enlightenment.

Equality

Make a keyword with your keyboard

```
(= :foo (keyword "foo" ))
```

Equality

Symbolism is all around us

```
(= 'foo (symbol ..... 'fod|.....))
```

Equality

When things cannot be equal, they must be different

```
(not= :fill-in-the-blank ..... true|.....)
```

Lists

Lists can be expressed by function or a quoted form

```
(= '( 1 2 3 4 5 ) (list 1 2 3 4 5))
```

Lists

They are Clojure seqs (sequences), so they allow access to the first

```
(= 1 (first '(1 2 3 4 5)))
```

1 2 3 4 5

Lists

As well as the rest

```
(= ____ '(2 3 4 5) (rest '(1 2 3 4 5)))
```

You have not yet attained enlightenment.

Lists

Count your blessings

```
(= ____ 3 (count '(dracula dooku chocula)))
```

Lists

Before they are gone

```
(= 0 (count '()))
```

Lists

The rest, when nothing is left, is empty

```
(= '() (rest '(100)))
```

You have not yet attained enlightenment.

Lists

Construction by adding an element to the front is easy

```
(= '(:a | :b :c :d :e) (cons :a '(:b :c :d :e)))
```

Lists

Conjoining an element to a list is strikingly similar

```
(= '(:a :b :c :d :e) (conj '(:b :c :d :e) :a))
```

You have not yet attained enlightenment.