Exercises: Variables

The Fortune Teller

Why pay a fortune teller when you can just program your fortune yourself?

- Store the following into variables: number of children, partner's name, geographic location, job title.
- Output your fortune to the screen like so: "You will be a X in Y, and married to Z with N kids."

See Solution

```
var numKids  = 5; var partner  = 'David Beckham'; var location = 'Costa Rica'; var jobTitle = 'web developer';  var future = 'You will be a ' + jobTitle + ' in ' + location + ', and married to ' + partner + ' ' + ' with ' + numKids + ' kids.'; console.log(future);
```

The Age Calculator

Forgot how old someone is? Calculate it!

- Store the current year in a variable.
- Store their birth year in a variable.
- Calculate their 2 possible ages based on the stored values.
- Output them to the screen like so: "They are either NN or NN", substituting the values.

See Solution

```
var year = 1984; var now  = 2012; var age  = now - year; console.log('They are either ' + age + ' or ' + (age - 1));
```

The Lifetime Supply Calculator

Ever wonder how much a "lifetime supply" of your favorite snack is? Wonder no more!

- Store your current age into a variable.
- Store a maximum age into a variable.
- Store an estimated amount per day (as a number).
- Calculate how many you would eat total for the rest of your life.
- Output the result to the screen like so: "You will need NN to last you until the ripe old age of X".

See Solution

```
var age = 28; var maxAge = 100; var numPerDay = 2; var totalNeeded = (numPerDay * 365) * (maxAge - age); var message = 'You will need ' + totalNeeded + ' cups of tea to last you until the ripe old age of ' + maxAge; console.log(message);
```

The Geometrizer

Calculate properties of a circle, using the definitions here.

- Store a radius into a variable.
- Calculate the circumference based on the radius, and output "The circumference is NN".
- Calculate the area based on the radius, and output "The area is NN".

See Solution

```
var radius = 3; var circumference = Math.PI * 2*radius; console.log("The circumference is " + circumference); var area = Math.PI * radius*radius; console.log("The area is " + area);
```

The Temperature Converter

It's hot out! Let's make a converter based on the steps here.

- Store a celsius temperature into a variable.
- Convert it to fahrenheit and output "NN°C is NN°F".
- Now store a fahrenheit temperature into a variable.
- Convert it to celsius and output "NN°F is NN°C."

See Solution

```
var celsius = 30; var celsiusInF = (celsius*9)/5 + 32;
console.log(celsius + '°C is ' + celsiusInF + '°F'); var fahrenheit =
20; var fahrenheitInC = ((fahrenheit - 32)*5)/9;
console.log(fahrenheit + '°F is ' + fahrenheitInC + '°C');
```