

EXAMPLE 43: CLOSURES CAN BE BUILT AROUND BOTH
DECLARED FUNCTIONS AND FUNCTION LITERALS

EXAMPLE 43: CLOSURES CAN BE BUILT AROUND BOTH DECLARED FUNCTIONS AND FUNCTION LITERALS

CLOSURE = SAY WE HAVE A NESTED FUNCTION +
VARIABLES LOCAL TO THE
OUTER SCOPE
"REFERENCING ENVIRONMENT"

THE NESTED FUNCTION COULD BE EITHER A
DECLARED FUNCTION OR A FUNCTION LITERAL

```
var PI = 3.14;
```

```
window.onload = function(){  
  var circle1 = new Circle(3);  
  var circle2 = new Circle(4);  
  var circle3 = new Circle(5);
```

**THE NESTED FUNCTION COULD BE EITHER A
DECLARED FUNCTION OR A FUNCTION LITERAL**

```
var circleArray = [circle1, circle2, circle3];  
var PI = 3.1415;
```

```
var printStuffAboutCircleArray = function(circleArray) {  
  var PI = 3.14159;  
  
  var getArea = function(circle){  
    console.log("Inside the nested function getArea, PI = " + PI);  
    return PI * circle.radius * circle.radius;  
  };  
  for (var i = 0; i < circleArray.length; i++) {  
    var c = circleArray[i];  
    console.log(c.radius + " * " + PI + " = " + getArea(c));  
  }  
  return getArea;  
}
```

CLOSURE + **=**

SAY WE HAVE A

NESTED

+

**VARIABLES LOCAL TO THE
OUTER SCOPE**

"REFERENCING"

```
var areaFunction = printStuffAboutCircleArray(circleArray);  
areaFunction(circle1);
```

```
};
```

THE NESTED FUNCTION COULD BE EITHER A
DECLARED FUNCTION OR A FUNCTION LITERAL

```
var printStuffAboutCircleArray =  
function(circleArray) {
```

```
var PI = 3.14159;
```

FUNCTION LITERALS

```
var getArea = function(circle){
```

```
  console.log("Inside the nested function getArea, PI = " + PI);  
  return PI * circle.radius * circle.radius;
```

```
};
```

```
for (var i = 0; i < circleArray.length; i++) {
```

```
  var c = circleArray[i];
```

```
  console.log(c.radius + ", " + getArea(c));
```

```
}
```

```
return getArea;
```

```
}
```

CLOSURE =

SAY WE HAVE A NESTED +
VARIABLES LOCAL TO THE
OUTER SCOPE
"REFERENCING"

THE NESTED FUNCTION COULD BE EITHER A
DECLARED FUNCTION OR A FUNCTION LITERAL

```
printStuffAboutCircleArray(circleArray) {
```

```
var PI = 3.14159;
```

```
  getArea(circle){
```

DECLARED FUNCTIONS

```
    console.log("Inside the nested function getArea, PI = " + PI);  
    return PI * circle.radius * circle.radius;
```

```
  };
```

```
  for (var i = 0; i < circleArray.length; i++) {
```

```
    var c = circleArray[i];
```

```
    console.log(c.radius + ", " + getArea(c));
```

```
  }
```

```
  return getArea;
```

```
}
```

CLOSURE =

SAY WE HAVE A NESTED
+
VARIABLES LOCAL TO THE
OUTER SCOPE
"REFERENCING"