# Principales matchers de Jasmine

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### 1. not

Invert the matcher following this expect

### **Example**

```
expect(thing).not.toEqual(realThing);
```

# 2. toBeCloseTo(expected, precision)

expect the actual value to be within a specified precision of the expected value.

#### Parameters:

Name	Туре	Attributes	Default	Description
expected	Object			The expected value to compare against.
precision	Number	<optional></optional>	2	The number of decimal points to check.

### **Example**

```
expect(number).toBeCloseTo(42.213, 3); // Comprueba si number
redondeado a 3 decimales coincide con 42.213
```

### 3. toBeDefined()

expect the actual value to be defined. (Not undefined)

### **Example**

```
expect(result).toBeDefined();
```

### 4. toBeFalse()

expect the actual value to be false.

### **Example**

```
expect(result).toBeFalse();
```

# 5. toBeTrue()

expect the actual value to be true.

#### **Example**

```
expect(result).toBeTrue();
```

# 6. toBeGreaterThan(expected)

expect the actual value to be greater than the expected value.

#### Parameters:

Name	Туре	Description

expected	Number	The value to compare against.

### **Example**

```
expect(result).toBeGreaterThan(3);
```

# 7. toBeGreaterThanOrEqual(expected)

expect the actual value to be greater than or equal to the expected value.

#### Parameters:

Name	Туре	Description
expected	Number	The expected value to compare against.

#### **Example**

```
expect(result).toBeGreaterThanOrEqual(25);
```

# 8. toBeInstanceOf(expected)

expect the actual to be an instance of the expected class

#### Parameters:

Name	Туре	Description
expected	Object	The class or constructor function to check for

#### **Example**

```
expect('foo').toBeInstanceOf(String);
expect(3).toBeInstanceOf(Number);
```

```
expect(new Error()).toBeInstanceOf(Error);
expect(bonoloto()).toBeInstanceOf(Array);
```

# 9. toBeLessThan(expected)

expect the actual value to be less than the expected value.

#### Parameters:

Name	Туре	Description
expected	Number	The expected value to compare against.

### Example

```
expect(result).toBeLessThan(0);
```

# 10. toBeLessThanOrEqual(expected)

expect the actual value to be less than or equal to the expected value.

#### Parameters:

Name	Туре	Description
expected	Number	The expected value to compare against.

### **Example**

```
expect(result).toBeLessThanOrEqual(123);
```

# 11. toBeNaN()

expect the actual value to be NaN (Not a Number).

### Example

```
expect(thing).toBeNaN();
```

# 12. toBeNull()

expect the actual value to be null.

#### **Example**

```
expect(result).toBeNull();
```

# 13. toBeUndefined()

expect the actual value to be undefined.

### **Example**

```
expect(result).toBeUndefined()
```

# 14. toContain(expected)

expect the actual value to contain a specific value.

#### Parameters:

Name	Туре	Description

### **Example**

```
expect(array).toContain(anElement);
expect(string).toContain(substring);
```

# 15. toEqual(expected)

expect the actual value to be equal to the expected, using deep equality comparison.

#### Parameters:

Name	Туре	Description
expected	Object	Expected value

### Example

```
expect(bigObject).toEqual({"foo": ['bar', 'baz']});
```

# 16. toHaveSize(expected)

expect the actual size to be equal to the expected, using array-like length or object keys size.

#### Parameters:

xpected	Object	Expected size
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#### **Example**

```
array = [1,2];
expect(array).toHaveSize(2);
```

### 17. toThrowError(message)

expect a function to throw an Error.

### **Ejemplo**

Pondremos como ejemplo una clase Jarra que tiene un setter llamado cantidad el cual lanza un error cuando le pasamos un valor negativo:

```
class Jarra {
  constructor(capacidad, cantidad) {
     this._capacidad = capacidad;
     this._cantidad = cantidad;
  }

set cantidad(c) {
    if (c < 0) throw new Error('La cantidad debe ser un número positivo');
    this._cantidad = Math.min(c, this._capacidad);
  }
}</pre>
```

Desde Jasmine podemos testear que efectivamente se lance el error con un código similar al siguiente:

```
expect(function() { jarra1.cantidad = -5
}).toThrowError('La cantidad debe ser un número
positivo');
```