

# Matchers

Jasmine has several built-in matchers. Here are a few:

`expect(x).toEqual(y);` compares objects or primitives `x` and `y` and passes if they are equivalent

`expect(x).toBe(y);` compares objects or primitives `x` and `y` and passes if they are the same object

`expect(x).toMatch(pattern);` compares `x` to string or regular expression `pattern` and passes if they match

`expect(x).toBeDefined();` passes if `x` is not `undefined`

`expect(x).toBeUndefined();` passes if `x` is `undefined`

`expect(x).toBeNull();` passes if `x` is `null`

`expect(x).toBeTruthy();` passes if `x` evaluates to true

`expect(x).toBeFalsy();` passes if `x` evaluates to false

`expect(x).toContain(y);` passes if array or string `x` contains `y`

`expect(x).toBeLessThan(y);` passes if `x` is less than `y`

`expect(x).toBeGreaterThan(y);` passes if `x` is greater than `y`

`expect(function(){fn();}).toThrow(e);` passes if function `fn` throws exception `e` when executed

*The old matchers `toEqual`, `toBe`, `toMatch`, and `toContain` have been deprecated and will be removed in a future release. Please change your specs to use `not.toEqual`, `not.toBe`, `not.toMatch`, and `not.toContain` respectively.*

Every matcher's criteria can be inverted by prepending `.not`:

`expect(x).not.toEqual(y);` compares objects or primitives `x` and `y` and passes if they are *not* equivalent