



# xUnit Cheat Sheet

## Simple Test

```
class UserTests
{
    [Fact]
    public void isAdult_AgeLessThan18_False()
    {
        User paul = new User(17);
        Assert.False(paul.isAdult());
    }
}
```

## Basic Assertions

```
Assert.True(condition);
Assert.False(condition);
Assert.Equal(expected, actual);           // Equal
Assert.NotEqual(expected, actual);        // Not equal
```

## Exception Assertions

```
Assert.Throws<expectedExceptionType>(method);

[Fact]
public void crash_Normal_ShouldThrow()
{
    Car car = new Car();

    Assert.Throws<NotImplementedException>(car.crash);
}
```



## Test Fixture

```
public class UserTests : IDisposable
{
    public DefaultPointDistributionBehaviorTests()
    { /* runs before each test */ }

    public void Dispose() { /* runs after each test */ }

    User paul = new User(5);

    [Fact]
    public void isAdult_AgeLessThan18_False()
    {
        Assert.That(paul.isAdult(), Is.False);
    }
}
```

## Value Parameterized Tests

```
class UserTests
{
    public static IEnumerable<object[]> adultAges()
    {
        yield return new object[]{18};
        yield return new object[]{20};
        yield return new object[]{60};
    }

    [Theory]
    [MemberData(nameof(adultAges))]
    public void isAdult_AgeLessThan18_False2(int age)
    {
        User paul = new User(age);
        Assert.True(paul.isAdult());
    }
}
```