**Exercise 1: Setting Up JUnit**

DummyTest.java

import org.junit.Test;  
import static org.junit.Assert.\*;  
  
public class DummyTest {  
 @Test  
 public void testSum() {  
 *assertEquals*(4, 2 + 2);  
 }  
}

**output:**

**A computer screen shot of a program

AI-generated content may be incorrect.**

**Exercise 3: Assertions in JUnit**

**Assertion.java**

**import static org.junit.Assert.\*;**

**import org.junit.Test;**

**public class AssertionsTest {**

**@Test**

**public void testAssertions() {**

**// Assert that 2 + 3 equals 5**

**assertEquals(5, 2 + 3);**

**// Assert that a condition is true**

**assertTrue(5 > 3);**

**// Assert that a condition is false**

**assertFalse(5 < 3);**

**// Assert that a value is null**

**assertNull(null);**

**// Assert that a value is not null**

**assertNotNull(new Object());**

**}**

**}**

**Output:**

**A screenshot of a computer

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**Exercise 4: Arrange-Act-Assert (AAA) Pattern, Test Fixtures**

**import static org.junit.Assert.\*;  
import org.junit.Before;  
import org.junit.After;  
import org.junit.Test;  
  
public class CalculatorTest {  
 private Calculator calc;  
  
 @Before  
 public void setUp() {  
 // Arrange: Initialize calculator before each test  
 calc = new Calculator();  
 }  
  
 @Test  
 public void testAddition() {  
 // Act: Perform addition  
 int result = calc.add(2, 3);  
  
 // Assert: Check the result  
 *assertEquals*(5, result);  
 }  
  
 @After  
 public void tearDown() {  
 // Cleanup after test  
 calc = null;  
 }  
}  
  
// Class under test  
class Calculator {  
 public int add(int a, int b) {  
 return a + b;  
 }  
}**

**output:**

**A screenshot of a computer

AI-generated content may be incorrect.**