**Scenario 1: Completely Randomized Design**

* What were the mean and standard deviation of the sample means

|  |  |  |
| --- | --- | --- |
| **Treatment** | **Mean** | **Standard Deviation** |
| A |  |  |
| B |  |  |

* Sketch boxplots of the results.

|  |
| --- |
| Results from you and your classmates: |

|  |
| --- |
| Here is what was obtained when a computer was used to randomize treatments under this design 1,000 times:  Treatment A:  Treatment B: |

**Scenario 2: Randomized Complete Block Design (Blocking by Age)**

* What were the mean and standard deviation of the sample means?

|  |  |  |
| --- | --- | --- |
| **Treatment** | **Mean** | **Standard Deviation** |
| A |  |  |
| B |  |  |

* Sketch boxplots of the results.

|  |
| --- |
| Results from you and your classmates: |

|  |
| --- |
| Here is what was obtained when a computer was used to randomize treatments under this design 1,000 times:  Treatment A:  Treatment B: |

**Scenario 3: Randomized Complete Block Design (Blocking by Initial Cholesterol)**

* What were the mean and standard deviation of the sample means?

|  |  |  |
| --- | --- | --- |
| **Treatment** | **Mean** | **Standard Deviation** |
| A | 21.3 | 2.5 |
| B | 25.1 | 1.6 |

* Sketch boxplots of the results.

|  |
| --- |
| Results from you and your classmates: |

|  |
| --- |
| Here is what was obtained when a computer was used to randomize treatments under this design 1,000 times:  Treatment A:  Treatment B: |

**Scenario 4: Randomized Complete Block Design (Blocked by Gender and Initial Cholesterol)**

* What were the mean and standard deviation of the sample means?

|  |  |  |
| --- | --- | --- |
| **Treatment** | **Mean** | **Standard Deviation** |
| A | 22.0 | 2.5 |
| B | 25.6 | 2.8 |

* Sketch boxplots of the results.

|  |
| --- |
| Results from you and your classmates: |

|  |
| --- |
| Here is what was obtained when a computer was used to randomize treatments under this design 1,000 times:  Treatment A:  Treatment B: |

**Scenario 5: Randomized Complete Block Design (Blocked by Exercise & Initial Cholesterol)**

* What were the mean and standard deviation of the sample means?

|  |  |  |
| --- | --- | --- |
| **Treatment** | **Mean** | **Standard Deviation** |
| A |  |  |
| B |  |  |

* Sketch boxplots of the results.

|  |
| --- |
| Results from you and your classmates: |

|  |
| --- |
| Here is what was obtained when a computer was used to randomize treatments under this design 1,000 times:  Treatment A:  Treatment B: |