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**Actividad de datos agrupados.**

**Materia: Bioestadística.**

**Grado: 4to cuatrimestre**

**Grupo: B**

# EJERCICIO 1

50 49 25 50 47  
 29 46 34 48 25  
 20 33 49 40 33  
 31 39 43 43 35  
 28 23 20 44 37

\*Rango =  $\frac{\text{No. Mayor} - \text{No. Menor}}{\text{No. Intervalos}}$

• Rango =  $\frac{50 - 20}{6} = 5$

| Intervalo | F <sub>i</sub>            | % F <sub>i</sub> | F <sub>ig</sub> | % F <sub>ig</sub> | $\bar{x}_i$ | F <sub>i</sub> $\bar{x}_i$              |
|-----------|---------------------------|------------------|-----------------|-------------------|-------------|---|
| 20-25     | ...3                      | 12%              | 3               | 12%               | 22.5        | 67.5                                    |
| 25-30     | ...4                      | 16%              | 7               | 28%               | 27.5        | 110                                     |
| 30-35     | ...5                      | 20%              | 12              | 48%               | 32.5        | 162.5                                   |
| 35-40     | ..2                       | 8%               | 14              | 56%               | 37.5        | 75                                      |
| 40-45     | ...4                      | 16%              | 18              | 72%               | 42.5        | 170                                     |
| 45-50     | ...7<br>$\Sigma F_i = 25$ | 28%              | 25              | 100%              | 47.5        | 332.5<br>$\Sigma F_i \bar{x}_i = 917.5$ |

| $\bar{x}_i^2$ | F <sub>i</sub> $\bar{x}_i^2$         |
|---------------|--------------------------------------|
| 506.25        | 7518.75                              |
| 756.25        | 3025                                 |
| 1056.25       | 5287.25                              |
| 1406.25       | 2812.5                               |
| 1806.25       | 7225                                 |
| 2256.25       | 75793.75                             |
|               | $\Sigma F_i \bar{x}_i^2 = 35,656.25$ |

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## EJERCICIO 2

|    |    |    |    |    |    |
|----|----|----|----|----|----|
| 80 | 75 | 71 | 80 | 71 | 44 |
| 38 | 56 | 80 | 42 | 68 | 45 |
| 70 | 40 | 75 | 41 | 53 | 54 |
| 78 | 42 | 66 | 45 | 64 | 58 |
| 55 | 56 | 73 | 56 | 41 | 64 |
| 38 | 67 | 79 | 49 | 44 | 38 |

$$* \text{Rango} = \frac{\text{No mayor} - \text{No menor}}{\text{No intervalos}}$$

$$* \text{Rango} = \frac{80 - 38}{7} = 6$$

| Intervalo | Fi        | % Fi   | Fia | % Fia  | $\bar{x}_i$ |
|-----------|-----------|--------|-----|--------|-------------|
| 38 - 44   | ..... 8   | 22.22% | 8   | 22.22% | 41          |
| 44 - 50   | ..... 5   | 13.88% | 13  | 36.11% | 47          |
| 50 - 56   | ... 3     | 8.33%  | 16  | 44.44% | 53          |
| 56 - 62   | .... 4    | 11.11% | 20  | 55.55% | 59          |
| 62 - 68   | .... 4    | 11.11% | 24  | 66.66% | 65          |
| 68 - 74   | ..... 5   | 13.88% | 29  | 80.55% | 71          |
| 74 - 80   | ..... 7   | 19.44% | 36  | 100%   | 77          |
|           | <u>36</u> |        |     |        |             |

| $F_i \bar{x}_i$ | $\bar{x}_i^2$ | $F_i \bar{x}_i^2$                  |
|-----------------|---------------|------------------------------------|
| 328             | 1681          | 13448                              |
| 235             | 2209          | 11045                              |
| 159             | 2809          | 8427                               |
| 236             | 3481          | 13924                              |
| 260             | 4225          | 16900                              |
| 355             | 5041          | 25205                              |
| 539             | 5929          | 47503                              |
| <u>2112</u>     |               | $\Sigma F_i \bar{x}_i^2 = 130,452$ |

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