| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 49 | 55 | 65 | 66 | 66 | 70 | 72 | 72 | 72 |
| 74 | 75 | 75 | 76 | 76 | 77 | 78 | 79 | 80 |
| 81 | 81 | 81 | 81 | 83 | 84 | 90 | | |

$K = 1 + 3.322 \log(25)$ $R = 90 - 49 + 1$

$K = 1 + 3.322 \log(1.39794)$ $R = 41 + 1$

$K = 1 + 4.64$ $R = 42$

$K = 5.64$

$i = \frac{42}{5.64}$ $i = 7.45$ $i = 7$

Tabla Con Intervalo

Puntaos de 25 alumnos en un examen de Contabilidad de Sociedades-

| K | LA | LRI | LRS | XS | F | FA | FxS |
|---|---|---|---|---|---|---|---|
| 1 | 42-55 | 48.5 | 55.5 | 52 | 2 | 2 | 104 |
| 2 | 56-62 | 55.5 | 62.5 | 59 | 0 | 2 | 0 |
| 3 | 63-69 | 62.5 | 69.5 | 66 | 3 | 5 | 198 |
| 4 | 70-76 | 69.5 | 76.5 | 73 | 9 | 14 | 657 |
| 5 | 77-83 | 76.5 | 83.5 | 80 | 9 | 23 | 720 |
| 6 | 84-90 | 83.5 | 90.5 | 87 | 2 | 25 | 174 |

1,853

## Media Aritmética

$$\bar{X}\ \frac{1,853}{25} = 74.12$$

## Mediana

$$Md = Li + \left(\frac{\frac{N}{2} - faa}{F}\right) i$$

$$Md = \frac{25}{2} = 12.5$$

$$Md = 69.5 + \left(\frac{12.5 - 5}{9}\right) 7 \qquad Md = 69.5 + \left(\frac{7.5}{9}\right) 7$$

$$Md = 69.5 + (0.83)\,7 \qquad Md = 69.5 + 5.81$$

$$Md = 75.31$$

## Moda

$$Mo\ Li + \left(\frac{\Delta 1}{\Delta 1 + \Delta 2}\right) i \qquad \Delta 1 = 9 - 3 = 6 \quad \Delta 2 = 9 - 9 = 0$$

$$Mo = 69.5 + \left(\frac{6}{6 - 0}\right) 7$$

$$Mo = 69.5 + \left(\frac{6}{6}\right) 7$$

$$Mo = 69.5 + (1)\,7 \qquad Mo = 69.5 + 7$$

$$Mo = 76.5$$

Cuartiles.-

$Q1 = 25/4 = 6.25$ $Q1 = 69.5 + \left(\frac{6.25-5}{9}\right)7$

$Q1 = 69.5 + \left(\frac{1.25}{9}\right)7$ $Q1 = 69.5 + (0.14)7$

$Q1 = 69.5 + 0.98$ $Q1 = 70.48$

$Q2 = \frac{2 \times 25}{4} = 12.5$ $Q2 = 69.5 + \left(\frac{12.5-5}{9}\right)7$

$Q2 = 69.5 + \left(\frac{7.5}{9}\right)7$ $Q2 = 69.5 + (0.83)7$

$Q2 = 69.5 + 5.81$ $Q2 = 75.31$

$Q3 = \frac{3 \times 25}{4} = 18.75$ $Q3 = 76.5 + \left(\frac{18.75-14}{9}\right)7$

$Q3 = 76.5 + \left(\frac{4.75}{9}\right)7$ $Q3 = 76.5 + (0.53)7$

$Q3 = 76.5 + 3.71$ $Q3 = 80.21$

# Deciles:

$D2 = \frac{25 * 2}{10} = 5$ $D2 = 62.5 + \left(\frac{5-2}{3}\right)7$

$D2 = 62.5 + \left(\frac{3}{3}\right)7$ $D2 = 62.5 + (1)7$

$D2 = 62.5 + 7$ $D2 = \underline{69.5}$

$D6 = \frac{25 \times 6}{10} = 15$ $D6 = 76.5 + \left(\frac{15-14}{9}\right)7$

$D6 = 76.5 + \left(\frac{1}{9}\right)7$ $D6 = 76.5\ (0.11)7$

$D6 = 76.5 + 0.77$ $D6 = \underline{77.27}$

$D9 = \frac{25 \times 9}{10} = 22.5$ $D9 = 76.5 + \left(\frac{22.5-14}{9}\right)7$

$D9 = 76.5 + \left(\frac{8.5}{9}\right)7$ $D9 = 76.5 + (0.94)7$

$D9 = 76.5 + 6.58$ $D9 = \underline{83.08}$

Percentiles:-

$P_{15} = \frac{25 * 15}{100} = 3.75$ $P_{15} = 62.5 + \left(\frac{3.75 - 2}{3}\right) 7$

$P_{15} = 62.5 + \left(\frac{1.75}{3}\right) 7$ $P_{15} = 62.5 + (0.58) 7$

$P_{15} = 62.5 + 4.06$ $P_{15} = \underline{66.56}$

$P_{70} = \frac{25 * 70}{100} = 77.5$ $P_{70} = 76.5 + \left(\frac{77.5 - 74}{9}\right) 7$

$P_{70} = 76.5 + \left(\frac{3.5}{9}\right) 7$ $P_{70} = 76.5 + (0.39) 7$

$P_{70} = 76.5 + 2.73$ $P_{70} = \underline{79.23}$

$P_{95} = \frac{25 \times 95}{100} = 23.75$ $P_{95} = 83.5 + \left(\frac{23.75 - 23}{2}\right) 7$

$P_{95} = 83.5 + \left(\frac{0.75}{2}\right) 7$ $P_{95} = 83.5 + (0.38) 7$

$P_{95} = 83.5 + 2.66$ $P_{95} = \underline{86.16}$

# Puntos obtenidos por 25 alumnos en un Examen de Contabilidad.-