

Puntajes obtenidos por 25 alumnos en un Examen de Estudios Sociales I de Primero Básico.

Intervalo	L_i	F	FA
49 - 55	48.5	2	2
58 - 69	55.5	3	5
70 - 76	69.5	9	14
77 - 83	76.5	9	23
84 - 90	83.5	2	25

D1
D3 D5
D6 D8

Deciles $Dx = L_i + \left(\frac{\frac{Nx}{10} - F_{aa}}{f} \right) i$

$D1 = L_i + \left(\frac{\frac{N1}{10} - F_{aa}}{f} \right) i$ $\frac{25 \times 1}{10} = 2.5$

$D1 = 55.5 + \left(\frac{2.5 - 2}{3} \right) 7$

$D1 = 55.5 + \left(\frac{0.5}{3} \right) 7$

$D1 = 55.5 + (0.77) 7$

$D1 = 55.5 + 7.79$

$D1 = 56.69$

$$D3 = L + r + \left(\frac{\frac{N3}{10} - f_{aa}}{F} \right)^2 \quad \frac{25 \times 3}{10} = \underline{\underline{7.5}}$$

$$D3 = 69.5 + \left(\frac{7.5 - 5}{9} \right)^2$$

$$D3 = 69.5 + \left(\frac{2.5}{9} \right)^2$$

$$D3 = 69.5 + (0.28)^2$$

$$D3 = 69.5 + 7.96$$

$$D3 = \underline{\underline{77.46}}$$

$$D5 = L + r + \left(\frac{\frac{N5}{10} - f_{aa}}{F} \right)^2$$

$$\frac{25 \times 5}{10} = \underline{\underline{12.5}}$$

$$D5 = 69.5 + \left(\frac{12.5 - 5}{9} \right)^2$$

$$D5 = 69.5 + \left(\frac{7.5}{9} \right)^7$$

$$D5 = 69.5 + (0.83)^7$$

$$D5 = 69.5 + 5.87$$

$$D5 = \underline{\underline{75.37}}$$

$$D6 = Lp + \left(\frac{\frac{N6}{10} \cdot faa}{f} \right)^i$$

$$\frac{25 \times 6}{10} = 75$$

$$D6 = 76.5 + \left(\frac{75 - 74}{9} \right)^7$$

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

$$D_6 = 76.5 + (0.77)^7$$

$$D_6 = 76.5 + 0.77$$

$$D_6 = \underline{\underline{77.27}}$$

$$D_9 = 25 + \left(\frac{\frac{N_9}{10} - f_{a9}}{f} \right)^9$$

$$D_9 = \frac{25 \times 9}{10} = 22.5$$

$$D_9 = 76.5 + \left(\frac{22.5 - 74}{9} \right)^7$$

$$D_9 = 76.5 + \left(\frac{8.5}{9} \right)^7$$

$$D_9 = 76.5 + (0.94)^7$$

$$D_9 = 76.5 + 6.58$$

$$D_9 = \underline{\underline{83.08}}$$