

Semana 5

Puntos obtenidos por 43 alumnos en un examen de ciencias.

Intervalo	L_{ri}	f	f_a	
54-58	53.5	4	4	
59-63	58.5	6	10	D2
64-68	63.5	12	22	D3 D4
69-73	68.5	13	35	D7 D8
74-78	73.5	3	38	
79-83	78.5	4	42	
84-88	83.5	1	43	

D2:

$$D2 = \frac{43 \times 2}{10} = 8.6$$

$$D2 = 58.5 + \left(\frac{8.6 - 4}{6} \right) 5$$

$$D2 = 58.5 + \left(\frac{4.6}{6} \right) 5$$

$$D2 = 58.5 + (0.77) 5$$

$$D2 = 58.5 + 3.85$$

$$D2 = \underline{62.35}$$

D3:

$$D3 = \frac{43 \times 3}{10} = 12.9$$

$$D2 = 63.5 + \left(\frac{12.9 - 10}{12} \right) 5$$

$$D_3 = 63.5 + \left(\frac{2.9}{12} \right) S$$

$$D_3 = 63.5 + (0.24) S$$

$$D_3 = 63.5 + 1.2$$

$$D_3 = \underline{64.7}$$

D_4

$$D_4 = \frac{43 \times 4}{10} = 17.2$$

$$D_4 = 63.5 + \left(\frac{17.2 - 10}{12} \right) S$$

$$D_4 = 63.5 + \left(\frac{7.2}{12} \right) S$$

$$D_4 = 63.5 + (0.60) S$$

$$D_4 = 63.5 + 3$$

$$D_4 = \underline{66.5}$$

D_7

$$D_7 = \frac{43 \times 7}{10} = 30.1$$

$$D_7 = 68.5 + \left(\frac{30.1 - 22}{13} \right) S$$

$$D_7 = 68.5 + \left(\frac{8.1}{13} \right) S$$

$$D_7 = 68.5 + (0.62) S$$

$$D_7 = 68.5 + 3.1$$

$$D_7 = \underline{71.6}$$

D_8

$$D_8 = \frac{43 \times 8}{10} = 34.4$$

$$D_8 = 68.5 + \left(\frac{34.4 - 22}{13} \right) S$$

$$D_8 = 68.5 + \left(\frac{12.4}{13} \right) S$$

$$D_8 = 68.5 + (0.95) S$$

$$D_8 = 68.5 + 4.75$$

$$D_8 = \underline{73.25}$$