

Complete la siguiente tabla y calcula los Percentiles 15, 70, y 95.

Puntos Obtenidos por 25 alumnos en un examen de Estudios Sociales I de Primer Básico.

Intervalo	Lx ⁱ	F	FA	
49 - 55	48.5	2	2	
56 - 69	55.5	3	5	P ₁₅
70 - 76	69.5	9	14	
77 - 83	76.5	9	23	P ₇₀
84 - 90	83.5	2	25	P ₉₅

$$P_{15} = Lx_i + \left(\frac{\frac{N \cdot P}{100} - f_{aa}}{F} \right) \cdot h$$

$$\frac{25 \times 15}{100} = 3.75$$

$$P_{15} = 55.5 + \left(\frac{3.75 - 2}{3} \right) \cdot 7$$

$$P_{15} = 55.5 + \left(\frac{1.75}{3} \right) \cdot 7$$

$$P_{15} = 55.5 + (0.58) \cdot 7$$

$$P_{15} = 55.5 + 4.06$$

$$P_{15} = \underline{\underline{59.56}}$$

$$P_{70} = L_i \left(\frac{N_{70}}{100} - f_{aa} \right)^i \quad \frac{25 \times 70}{100} = 77.5$$

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

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

$$P_{70} = 76.5 + (0.39)^7$$

$$P_{70} = 76.5 + 2.73$$

$$P_{70} = \underline{\underline{79.23}}$$

$$P_{95} = L_i \left(\frac{N_{95}}{100} - f_{aa} \right)^i \quad \frac{25 \times 95}{100} = 23.75$$

$$P_{95} = 63.5 + \left(\frac{23.75 - 23}{2} \right)^7$$

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

$$P_{95} = 83.5 + (0.38)^7$$

$$P_{95} = 83.5 + 2.66$$

$$P_{95} = \underline{\underline{86.16}}$$