

Semana 24

Instrucciones: Complete la siguiente tabla y calcule los Percentiles: 15, 70 y 95.

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

Intervalo	Lri	f	Fa
49-55	52.5	2	2
56-69	55.5	3	5
70-76	69.5	9	14
77-83	76.5	9	23
84-90	83.5	2	25

$$P_x = L_{ri} + \left(\frac{N_x - F_{aa}}{100} \right) \cdot \frac{F_i}{f_i}$$

$$P_{15} = L_{ri} + \left(\frac{N_{15} - F_{aa}}{100} \right) \cdot \frac{F_i}{f_i}$$

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

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

$$P_{15} = 55.5 + (0.875) \cdot 7$$

$$P_{15} = 55.5 + 6.125$$

$$P_{15} = 61.625$$

$$P_x = L_{ri} + \left(\frac{N_x - F_{aa}}{100} \right) \cdot \frac{F_i}{f_i}$$

$$P_{70} = L_{ri} + \left(\frac{N_{70} - F_{aa}}{100} \right) \cdot \frac{F_i}{f_i}$$

$$\frac{25 \times 70}{100} = 17.5$$

$$P_{70} = 76.5 + \left(\frac{17.5 - 14}{2} \right) \cdot 7$$

$$P_{70} = 76.5 + (1.75) \cdot 7$$

$$P_{70} = 76.5 + 12.25$$

$$P_{70} = 88.75$$

$$P_0 = L + i + \left(\frac{N \times - F_{an}}{100} \right)^i$$

$$P_{95} = L + i + \left(\frac{N_{95} - F_{an}}{100} \right)^i$$

$$\frac{25 \times 95}{100} = 23.75$$

$$P_{95} = 83.5 \left(\frac{23.75 - 23}{2} \right)^i$$

$$P_{95} = 83.5 + (0.48)^i$$

$$P_{95} = 83.5 + 0.86$$

$$P_{95} = 84.36$$

¡Fin de la actividad!