

Actividad #6

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

Intervalo	L_{ri}	F	F_{a_i}	
49 - 55	48.5	2	2	
56 - 69	56.5	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}

$$P_x = L_{ri} + \left(\frac{\frac{N_x}{100} - F_{a_{i-1}}}{f} \right) \cdot i$$

Percil 15

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

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

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

$$P_{15} = 55.5 + 4.06 = 59.56$$

Percil 70

$$P_{70} = 76.5 + \left(\frac{17.5 - 14}{9} \right) \cdot 7$$

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

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

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

Percil 95

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

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

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

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

R# $P_{15} = 59.56$

$P_{70} = 79.23$

$P_{95} = 86.76$