

Actividad 8

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49 - 55 - 65 - 66 - 66 - 70 - 72

72 - 72 - 74 - 75 - 75 - 76 - 76

77 - 78 - 79 - 80 - 81 - 81 - 81

81 - 83 - 84 - 90

$$K = 1 + 3.322 \log(n)$$

$$K = 1 + 3.322 (\log) 25$$

$$K = 1 + 3.322 (1.39794)$$

$$K = 1 + 4.64$$

$$K = 5.64$$

$$R = D_{ma} - D_{ma} + 1$$

$$R = 90 - 49 + 1$$

$$R = 41 + 1$$

$$R = 42$$

$$I = \frac{42}{5.64} =$$

$$I = 7$$

K	LA	L _{vi}	VS	XS	F	F _a	Exs
1	49-55	48.5	55.5	52	2	2	104
2	56-62	55.5	62.5	59	0	2	0
3	63-69	62.5	69.5	66	3	5	198
4	70-76	69.5	76.5	73	9	14	657
5	77-83	76.5	83.5	80	9	23	720
6	84-90	83.5	90.5	87	2	25	174

Media Aritmética

49-55-65-66-66-70-72-72-72-74-75-75-76-76-77-78-81-81-81-83-84-90

25

$$1853 \div 25 = 74.12$$

$$Md = 69.5 + (0.83)7$$

$$Md = 69.5 + 5.81$$

$$Md = 75.31$$

$$MO = L + i \left(\frac{4}{\Delta_{102}} \right) i$$

$$\Delta 1 = 9 - 3 = 6$$

$$MO = 69.5 + \left(\frac{6}{610} \right) 7$$

$$MO = 76.5$$

$$\Delta 2 = 9 - 9 = 0$$

Acumulados

Cuartiles.

$$Q1 = L_{ri} + \left(\frac{N/4 - F_{aa}}{f} \right) i$$

$$\frac{25}{4} = 6.25$$

$$Q1 = 69.5 + \left(\frac{6.25 - 5}{9} \right) 7$$

$$Q1 = 69.5 + \left(\frac{1.25}{9} \right) 7$$

$$Q1 = 69.5 + (0.14) 7$$

$$Q1 = 69.5 + 0.98$$

$$Q1 = 70.48$$

$$Q2 = L_{ri} + \left(\frac{N/4 - F_{aa}}{f} \right) i$$

$$\frac{2 \times 25}{4} = 12.5$$

$$Q2 = 69.5 + \left(\frac{12.5 - 5}{9} \right) 7$$

$$Q2 = 69.5 + \left(\frac{7.5}{9} \right) 7$$

$$Q2 = 69.5 + (0.83) 7$$

$$Q2 = 69.5 + 5.81$$

$$Q2 = 75.31$$

$$Q3 = L_{ri} + \left(\frac{N/4 - F_{aa}}{f} \right) i$$

$$\frac{3 \times 25}{4} = 18.75$$

$$Q3 = 76.5 + \left(\frac{18.75 - 14}{9} \right) 7$$

$$Q3 = 76.5 + \left(\frac{4.75}{9} \right) 7$$

$$Q3 = 76.5 + (0.53) 7$$

$$Q3 = 76.5 + 3.71$$

$$Q3 = 80.21$$

Deciles.

$$D_2 = L_{ri} + \left(\frac{N/2 - F_{ag}}{f} \right) i$$

$$\frac{2 \times 25}{10} = 5$$

$$D_2 = 62.5 + \left(\frac{5 - 2}{3} \right) 7$$

$$D_2 = 62.5 + \left(\frac{3}{3} \right) 7$$

$$D_2 = 62.5 + (1) 7$$

$$D_2 = 62.5 + 7 =$$

$$D_2 = 69.5$$

$$D_6 = L_{ri} + \left(\frac{N/6 - F_{ag}}{f} \right) i$$

$$\frac{25 \times 6}{10} = 15.0$$

$$76.5 + \left(\frac{15.0 - 14}{9} \right) 7$$

$$76.5 + \left(\frac{1.00}{9} \right) 7$$

$$76.5 + (0.11) 7$$

$$76.5 + 0.77$$

$$77.27$$

$$D_9 = L_{ri} + \left(\frac{N/9 - F_{ag}}{f} \right) i$$

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

$$76.5 + \left(\frac{22.5 - 14}{9} \right) 7$$

$$76.5 + \left(\frac{8.50}{9} \right) 7$$

$$76.5 + (0.94) 7$$

$$76.5 + 6.58$$

$$D_9 = 83.08$$

Percentiles.

$$P_{15} = L_{rit} + \left(\frac{N/15 - F_{ac}}{f} \right) i$$

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

$$62.5 + \left(\frac{3.75 - 2}{3} \right) 7$$

$$62.5 + \left(\frac{1.75}{3} \right) 7$$

$$62.5 + (0.58) 7$$

$$62.5 + 4.06$$

$$66.56$$

$$P_{70} = L_{rit} + \left(\frac{N/70 - F_{ac}}{f} \right) i$$

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

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

$$76.5 + \left(\frac{3.50}{9} \right) 7$$

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

$$76.5 + 2.73$$

$$79.23$$

$$P_{95} = L_{rit} + \left(\frac{N/95 - F_{ac}}{f} \right) i$$

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

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

$$83.5 + \left(\frac{0.75}{2} \right) 7$$

$$83.5 + (0.38) 7$$

$$83.5 + 2.66$$

$$86.16$$

