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Área: Estadística aplicada a la Educación _____

Grado: 5º. _____ Carrera: Magisterio de Educación Preprimaria _____

Actividad: 7 _____

Fecha: 22 de junio de 2021 _____

Catedrática: Freddy Barrios. _____

Actividad 7

22 / 06 / 21

Hallar los percentiles 21 y 35 de las siguientes series de datos no agrupados. Realizar procedimiento en el Cuaderno.

a) 28, 25, 30, 51, 60, 21, 49, 49, 58.

21, 25, 28, 30, 49, 49, 51, 58, 60

$$P_{21} = 21 \frac{(9+1)}{100} = P_{21} = 21 \frac{(10)}{100} = P_{21} = \frac{210}{100} = 2.1$$

$$P_{21} = 25 + (28 - 25) (0.1)$$

$$P_{21} = 25 + (3) (0.1)$$

$$P_{21} = 25 + 0.3$$

$$P_{21} = 25.3$$

$$P_{35} = 35 \frac{(9+1)}{100} = P_{35} = 35 \frac{(10)}{100} = P_{35} = \frac{350}{100} = P_{35} = 3.5$$

$$P_{35} = 28 + (30 - 28) (0.5)$$

$$P_{35} = 28 + (2) (0.5)$$

$$P_{35} = 28 + 1$$

$$P_{35} = 29$$

b) 19, 24, 41, 12, 50, 80, 90, 23

12, 19, 23, 24, 41, 50, 80, 90

$$P_{21} = 21 \frac{(8+1)}{100} = P_{21} = 21 \frac{(9)}{100} = P_{21} = \frac{189}{100} = P_{21} = 1.89$$

$$P_{21} = 19 + (24 - 19) (0.89)$$

$$P_{21} = 19 + (5) (0.89)$$

$$P_{21} = 19 + 4.45$$

$$P_{21} = 23.45$$

$$P_{21} = 18.23$$

$$P_{35} = 35 \frac{(8+1)}{100} = P_{35} = 35 \frac{(9)}{100} = \frac{315}{100} = P_{35} = 3.15$$

$$P_{35} = 23 + (24 - 23) (0.15)$$

$$P_{35} = 23 + (1) (0.15)$$

$$P_{35} = 23 + 0.15$$

$$P_{35} = 23.15$$

c) 34, 14, 12, 51, 47, 50, 62, 89, 49, 99, 101, 85

12, 14, 34, 47, 49, 51, 51, 62, 85, 89, 99, 101

$$P_{21} = \frac{21(12+1)}{100} = P_{21} = \frac{21(13)}{100} = P_{21} = \frac{273}{100} = P_{21} = 2.73$$

$$P_{21} = 14 + (34 - 14)(0.73)$$

$$P_{21} = 14 + (20)(0.73)$$

$$P_{21} = 14 + 14.6$$

$$P_{21} = \boxed{28.6}$$

$$P_{35} = \frac{35(12+1)}{100} = P_{35} = \frac{35(13)}{100} = P_{35} = \frac{455}{100} = P_{35} = 4.55$$

$$P_{35} = 47 + (49 - 47)(0.55)$$

$$P_{35} = 47 + (2)(0.55)$$

$$P_{35} = 47 + 1.1$$

$$P_{35} = \boxed{48.1}$$