

A) Calcular Media, Moda y Mediana B) Gra Fi
 C) Conclusión

Eddades	X_i	F_i absoluta	F_i absoluta acumulada	$X_i \cdot F_i$
0 - 2	1	6	6	6
2 - 4	3	8	14	24
4 - 6	5	15	29	75
6 - 8	7	11	40	77
10 - 12	11	3	43	33
12 - 14	13	4	47	52
$N = 47$		47		267

Media

$$X = \frac{\sum X_i \cdot F_i}{N} = \frac{267}{47} = 5.68$$

Moda

$$M_o = L_i + \frac{f_i - f_{i-1}}{(f_i - f_{i-1}) + (f_i - f_{i+1})} \cdot di$$

$$M_o = 2 + \frac{8 - 6}{(8 - 6) + (8 - 15)} \cdot 2 = 2 + \frac{2}{2 + 7} \cdot 2 = 2 + \frac{2}{9}$$

$$2 + 0.4 = \underline{2.4}$$

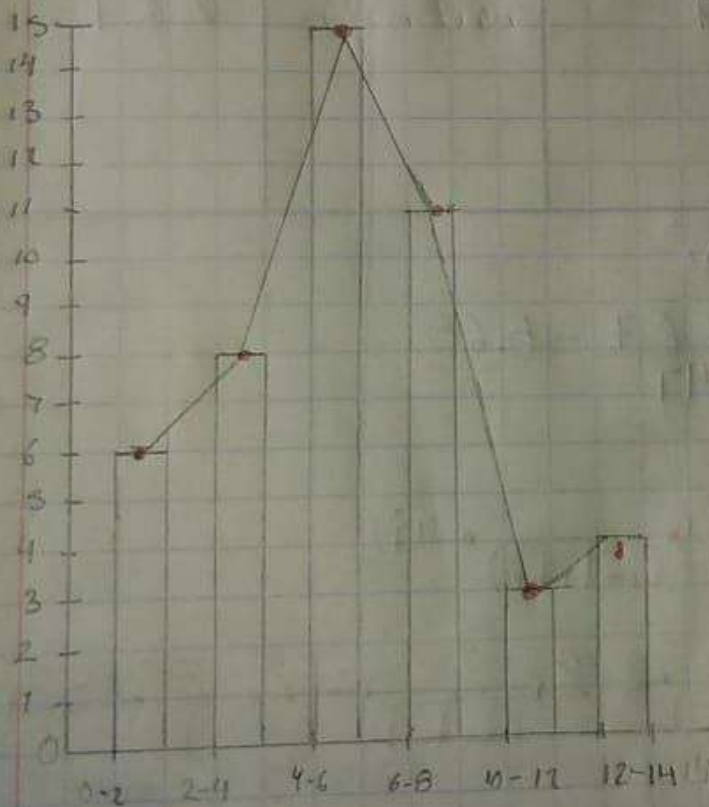
Mediana

$$Mc = L_i + \frac{\frac{N}{2} - F_{i-1}}{f_i} \cdot ai$$

$$Mc = 2 + \frac{\frac{47}{2} - 6}{8} \cdot 2 = 2 + \frac{17.5}{8} \cdot 2 + \frac{35}{8}$$

$$2 + 4.3 = 6.3$$

Gráfica



Conclusión = hay más niños de 6 - 8 años

Estimación Puntual NHIS

Cuantitativo

27, 27, 29, 24, 18, 16, 21, 20, 20, 28, 30, 19, 17, 23, 24

- a) Calcular media
- b) Calcular Varianza

Proporción mayor e igual a 25

Media

$$\frac{16, 17, 18, 19, 20, 20, 21, 23, 24, 24, 27, 27, 28, 29, 30}{15} = \frac{343}{15} = 22.8$$

$$X = \frac{\sum X_i \cdot f_i}{N} = \frac{343}{15} = 22.8$$

Varianza

$$s^2 = s_x^2 = \frac{(\sum X_i^2 \cdot n_i) - n \cdot \bar{x}^2}{n - 1}$$

$$16^2 = 256$$

$$17^2 = 289$$

$$18^2 = 324$$

$$19^2 = 361$$

$$20^2 = 400$$

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$$21^2 = 441$$

$$23^2 = 529$$

$$24^2 = 576$$

$$24^2 = 576$$

$$27^2 = 729$$

$$27^2 = 729$$

$$28^2 = 784$$

$$29^2 = 841$$

$$30^2 = 900$$

$$8,135$$

$$\frac{\sqrt{8,135 - 15 \cdot 22.8^2}}{15 - 1} = \frac{\sqrt{8,135 - 7,797}}{14} = \frac{\sqrt{338}}{14}$$

Proporción mayor e igual a 25

$$P = P_x = \frac{x}{n} = \frac{5}{14} = 0.3 \times 100 = 30\%$$