

Zak

Gilliam

HW-1

Bios
4/12/0

Written

1. Ordinal data has a specific ordering. Nominal data has no numerical relationship between values
2. Relative frequency would be useful when comparing two datasets of different sizes
- 3.
- discrete
 - ordinal
 - binary
 - continuous
 - binary
 - ordinal
 - discrete
 - nominal

4.

- $\frac{1}{n} \sum_{i=1}^{13} x_i \approx \frac{1}{13} \sum_{i=1}^{13} x_i \approx [25.6] \text{ months}$
- [20] months

c. [0.1, 96]

d. IQR = $Q_3 - Q_1$

= 38 - 61

= [34] months

5.

- Mean $\frac{1}{5} \sum_{n=1}^5 (x_n) = [12.96] \text{ mm}$ Range = [9.2, 18.1]
median = [11.4 mm]

Std = $\sqrt{\frac{1}{5-1} \sum_{n=1}^5 (x_n - 12.94)^2} = 3.6$

b $\sum_{n=1}^5 (x_n - 12.94) = (9.2 - \bar{x}) + (10.9 - \bar{x}) + (11.4 - \bar{x}) + (15.1 - \bar{x}) + (18.1 - \bar{x})$
 $= -3.74 + -2.04 + -1.54 + 2.16 + 5.16$
 $= 0$

c. Mean = $\frac{1}{6} \sum_{n=1}^6 x_i = 21.98$ // median = 22.05

Std Dev = $\sqrt{\frac{1}{6-1} \sum_{n=1}^6 (x_n - 21.98)^2} = 7.14$ // range = [10.7, 32.5]

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Hw-1 Cont

6. Based on the data Presented, No. While there is a positive slope in deaths overtime, there is no data presented that represents public health. Additional variables, like % of population with Chronic disease, access to Sanitation, etc. would be necessary to prove this relationship.