Central Tendencies Assignment

mean

1) mean of following

a) 9, 7, 11, 13, 2, 4, 5, 5 = $56/8 = 7$

b) 9.2, 10.2, 14.7, 5.9, 4.9, 11.1, 10.5 = $59.5/7$

$= 8.5$

c) 1/2, 1/4, 2 1/2, 5 1/2, 3 1/4, 2 1/2

$= \frac{5/4 + 5/2 + 1/2 + 13/4 + 5/2}{5}$

$= \frac{\frac{5+10+22+13+10}{4}}{5}$

$= \frac{60/4}{5}$

$= 15/5 = 3$

2. Mean of first 10 fibonacci

1, 1, 2, 3, 5, 8, 13, 21, 34, 55

$= \frac{143}{10} = 14.3$

3) mean & median of first 5 prime numbers

2, 3, 5, 7, 11

$\text{mean} = \frac{33}{5} = 6.6$

median = 5

4) mean of 8, 11, 6, 14, x, 13 = 66

$\frac{8+11+6+14+x+13}{6} = 66$

$\frac{52+x}{6} = 66$

$52 + x = 66 \times 6 = 396$

$x = 396 - 52$

$x = 344$

5) $\frac{6+8+x+2+10+2x-1+2}{6} = 9$

$27 + 3x = 54$

$3x = 54 - 27$

$x = 27/3 = 9$

6

a) 12, 12, 12, 12

Age	12	10	15	14	8
Boys	5	3	2	6	4

$$\text{Mean} = \frac{12\times5 + 10\times3 + 15\times2 + 14\times6 + 8\times4}{20}$$

$$= \frac{236}{20} = 11.8$$

b) $$\frac{25\times8 + 30\times12 + 15\times10 + 20\times6 + 24\times4}{40}$$

$$= \frac{200 + 360 + 150 + 120 + 96}{40}$$

$$= 23.15$$

7) mode of following data

a) 12, 8, 4, 8, 1, 8, 9, 11, 9, 10, 12, 8

Mode = 8

b) 15, 22, 17, 19, 22, 17, 29, 24, 17, 15

mode: 17

c) 0, 3, 2, 1, 3, 5, 4, 3, 4, 2, 1, 2, 0

mode = 3

d) 1, 7, 2, 4, 5, 9, 8, 3

no mode

8. 17, x, 24, x+2, 35, 36, 46

median = 25

and above observations mentioned in ascending order.

so x+4 = 25

x = 25 - 2

x = 18

9. If not in already order

then is possibly

if x = 25 where

x+4 = 25

possible explained in class

10.

a) Median

b) no

c) mean.

d) mode