Central Tendencies Assignment

(1) a = [9, 7, 11, 13, 2, 4, 5, 5]

$$\text{mean}(a) = \frac{9+7+11+13+2+4+5+5}{8} = \frac{56}{8} = 7.$$

(b) b = [2.2, 10.2, 14.7, 5.9, 4.9, 11.1, 10.5]

$$= \frac{59.5}{7} = 8.5$$

(c) c = [11/4, 2 1/2, 5 1/2, 3 1/4, 2 1/2]

$$= \frac{57}{5} = 11.4$$

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(2)

(4) $\frac{8+11+16+14+x+13}{6} = 66.$

$52 + x = 396 \quad x = 396 - 52$

$\boxed{x = 344}$

13
20
19
52

44 x
6
396
52
344

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

$3x + 27 = 54.$

$3x = 27. \quad \boxed{x = 9}$

99
99
99

(6) (a) age = [12 10 15 14 8]

No = 20 $\quad$ mean = $\frac{57}{20} = \boxed{2.85}$

(b) Marks = [25 20 15 20 34]

No = 90 $\quad$ mean = $\frac{114}{40} = \boxed{2.85}$

(7) (a) = 12, 8, 14, 8, 11, 8, 9, 11, 9, 10, 12, 8

8=4
9=2
12=2
1-1
10-1
11-1

Mode = 8

(b) 15, 22, 17, 19, 22, 17, 28, 24, 17, 15

Mode = 17

(c) 6, 3, 2, 1, 3, 5, 4, 3, 4, 2, 1, 2, 10

Mode = 3

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

Mode = No Mode

(8)

Median = 25.

17, x, 24, x+7, 35, 36, 46. x = ?

~~17~~, ~~24~~, x+7, 35, ~~36~~, ~~46~~

x+7 = 25

x = 25 - 7

x = 18

(9) Suppose.

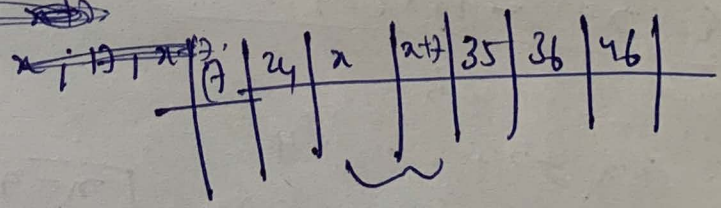
~~(a)~~. we can change last four.

Only first four.

∴ 17, 24, x, x+7 (a) x, x+7, 17, 24.

~~17, 24, x, x+7~~

(b) x < 17.



(10) (A) & (D).