

Central Tendencies

1) a) 2, 4, 5, 5, 7, 9, 11, 13

$$= \frac{2 + 4 + 5 + 5 + 7 + 9 + 11 + 13}{7} = \frac{49}{7} = \boxed{7}$$

b) $\frac{2.2 + 4.9 + 5.9 + 10.2 + 10.5 + 11.1 + 14.7}{7}$

$$= \boxed{8.5}$$

c) ~~10~~ 2.75, 10.5, 25.2, 7.75, 10.5

$$= \frac{2.75 + 10.5 + 7.75 + 10.5 + 25.2}{5}$$

$$= \boxed{11.34}$$

3) mean & median of first 5 prime n.o

$$p = [2, 3, 5, 7, 11]$$

$$\frac{28}{5} = \boxed{5.6}$$

4.

$$\frac{8+11+6+14+12+13}{6} = 66$$

$$x = \frac{33}{66 \times 3}$$

$$\frac{52}{26 \cdot 13}$$

$$x = \frac{99}{13}$$

$$x = 7.6$$

5)

$$\frac{6+8+x+2+1.0+2x-1+2}{6} = 9$$

$$\frac{27+3x}{6} = 9$$

$$3x = \frac{54}{27}$$

$$x = \frac{54}{27 \times 3} = 0.66$$

6)

$$a) \frac{60+30+30+84+32}{20}$$

$$= 11.8$$

$$b) \frac{200+360+150+180+96}{40}$$

$$= 24.65$$

7. a) 8

b) 17

c) 3

d) No mode

8) $17 + x + \frac{24 + x + 7}{2} + 35 + 36 + 46 =$

$\frac{x+7+1}{2} =$

$\frac{n+1}{2} = 25$ $x = 18$

Since the median is $\frac{7+1}{2} = 25$
 ~~$\frac{x+7+1}{2} = 25$~~
 & the center most element is $x+7$

$\frac{x+8}{2} = 25$
 $x = \frac{25 \times 2}{1} = 50$ $6 = 25$

$\begin{array}{r} 25 \\ - 7 \\ \hline 18 \end{array}$	$\begin{array}{r} 625 \\ 7 \\ \hline 13 \end{array}$
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18

9) $x, 17, x+7, 24, 35, 36, 46$

18 23

find x median = 25

given $\frac{n+1}{2} = 25$

Since the median is 25 the possible values of x can be either 25 or 18

10) a) will we mode

c) mean

d) mode