Name:

Find the modal class and median class from the following grouped frequency tables:

a)
Age	Frequency
$0 < x \le 10$	5
$10 < x \le 20$	10
$20 < x \le 30$	15
$30 < x \le 40$	14
$40 < x \le 50$	10
$50 < x \le 60$	8

Modal class :

20 < x ≤ 30

Median class :

30 < x ≤ 40

b)
Time	Frequency
$0 < x \le 2$	4
$2 < x \le 4$	12
$4 < x \le 6$	8
$6 < x \le 8$	16
$8 < x \le 10$	5
$10 < x \le 12$	7

Modal class :

6 < x ≤ 8

Median class :

6 < x ≤ 8

c)
Weight	Frequency
$5 < x \le 10$	10
$10 < x \le 15$	18
$15 < x \le 20$	8
$20 < x \le 25$	12
$25 < x \le 30$	20
$30 < x \le 35$	6

Modal class :

25 < x ≤ 32

Median class :

20 < x ≤ 25

d)
Speed	Frequency
$10 < x \le 12$	24
$12 < x \le 14$	10
$14 < x \le 16$	6
$16 < x \le 18$	2
$18 < x \le 20$	4
$20 < x \le 22$	3

Modal class :

10 < x ≤ 12

Median class :

12 < x ≤ 14

e)
Height	Frequency
$70 < x \le 74$	6
$74 < x \le 78$	12
$78 < x \le 82$	4
$82 < x \le 86$	16
$86 < x \le 90$	8
$90 < x \le 94$	6
$94 < x \le 98$	18

Modal class :

94 < x ≤ 98

Median class :

82 < x ≤ 86

f)
Size	Frequency
$0 < x \le 2$	0
$2 < x \le 4$	1
$4 < x \le 6$	2
$6 < x \le 8$	8
$8 < x \le 10$	16
$10 < x \le 12$	21
$12 < x \le 14$	15

Modal class :

10 < x ≤ 12

Median class :

10 < x ≤ 12

g)
Length	Frequency
$16 < x \le 22$	3
$22 < x \le 28$	9
$28 < x \le 34$	8
$34 < x \le 40$	21
$40 < x \le 46$	8
$46 < x \le 52$	28
$52 < x \le 58$	6

Modal class :

46 < x ≤ 52

Median class :

40 < x ≤ 46

h)
Volume	Frequency
$20 < x \le 30$	24
$30 < x \le 40$	19
$40 < x \le 50$	27
$50 < x \le 60$	16
$60 < x \le 80$	10
$70 < x \le 90$	14
$80 < x \le 100$	31

Modal class :

80 < x ≤ 100

Median class :

50 < x ≤ 60

Exam question:

50 painters painted a wall. The time they took in minutes was recorded. The table shows the results.

a) Find the group containing the median.

20 < x ≤ 30

Time (m)	Frequency
$0 < x \le 10$	3
$10 < x \le 20$	12
$20 < x \le 30$	20
$30 < x \le 40$	10
$40 < x \le 50$	3
$50 < x \le 60$	2