

$$\text{Mean} = \frac{\sum fx}{\sum f}$$

Ex: 37.2

score	frequency (f)	fx
1	12	12
2	11	22
3	8	24
4	12	48
5	7	35
6	10	60
	60	201

$$\begin{aligned} \text{Mean} &= \frac{\sum fx}{\sum f} \\ &= \frac{201}{60} \\ &= 3.35 \end{aligned}$$

$$\text{Median} = \underline{3}$$

$$\text{Mode} = \underline{4}, \text{ Range} = 6 - 1 = 5$$

3. a)
$$\text{Mean} = \frac{\sum fx}{\sum f}$$

$$\begin{aligned} &= \frac{(0 \times 0) + (1 \times 0) + (2 \times 0) + (3 \times 6) + (4 \times 4) + (5 \times 6) + (6 \times 10) + \\ & \quad 7 \times 16 + 8 \times 18}{0 + 6 + 4 + 6 + 10 + 16 + 18} \end{aligned}$$

$$= \frac{380}{60}$$

$$= \underline{6.33} \text{ (2 dp)}$$

$$\text{Median} = \underline{7}$$

$$\text{Mode} = \underline{8}$$

$$\text{Range} = 8 - 3 = 5$$

⑥ The mode. it gives the highest number of flowers per bush.

How to find mean for grouped data.

Date: ___/___/___

$$\text{Mean} = \frac{\sum fx}{\sum f}$$

Ex: 37-3

1. a)	Height (cm)	frequency f	mid-value (x)	fx
	1.8-1.9	2	$\frac{1.8+1.9}{2} 1.85$	3.7
	1.9-2.0	5	1.95	9.75
	2.0-2.1	10	2.05	20.5
	2.1-2.2	22	2.15	47.3
	2.2-2.3	7	2.25	15.75
	2.3-2.4	4	2.35	9.4
		50		106.4

b)
$$\text{Mean} = \frac{\sum fx}{\sum f} = \frac{106.4}{50} = 2.128$$

c) Modal class height = 2.1-2.2 m

2. a

Hours of overwork.	frequency.	mid-value	fx
0-9	12	4.5	54
10-19	18	14.5	261
20-29	22	24.5	539
30-39	64	34.5	2208
40-49	32	44.5	1424
50-59	20	54.5	1090
	168		5576

Mean = $\frac{5576}{168} = 33$ hours.

Modal class = 30-39.