

1. The table shows data on the height(h) of 50 seedlings(measurements expressed in mm).

class interval	mid-point	frequency	mid-point x freq.
$10 \leq h < 15$		8	
$15 \leq h < 20$		17	
$20 \leq h < 25$		19	
$25 \leq h < 30$		5	
	totals		

First complete the table. Using the information answer the questions:

- What is the modal class?
 - Estimate the median height of seedlings. (whole number)
 - Estimate the mean height of seedlings. (2 d.p.)
2. The table shows the distribution of children's age(a) in a secondary school.

class interval	mid-point	frequency	mid-point x freq.
$11 \leq a < 12$		42	
$12 \leq a < 13$		38	
$13 \leq a < 14$		45	
$14 \leq a < 15$		38	
	totals		

First complete the table. Using the information answer the questions.

- What is the modal class?
 - Estimate the median age of the children at the school. (whole number)
 - Estimate the mean age of children at the school. (2 d.p.)
3. The table shows the number of visits(v) to the doctor patients at a surgery make in a year.

class interval	mid-point	frequency	mid-point x freq.
$0 \leq v < 5$		5	
$5 \leq v < 10$		47	
$10 \leq v < 15$		11	
	totals		

First complete the table. Using the information answer the questions.

- What is the modal class?
- Estimate the median number of visits made to the surgery in a year. (whole number)
- Estimate the mean number of visits made to the surgery in a year. (2 d.p.)

1.

class interval	mid-point	frequency	mid-point x freq.
$10 \leq h < 15$	12.5	8	100
$15 \leq h < 20$	17.5	17	297.5
$20 \leq h < 25$	22.5	19	427.5
$25 \leq h < 30$	27.5	5	137.5
	totals	49	962.5

(a) $20 \leq h < 25$

(b) 20 mm

(c) 19.64 mm

2.

class interval	mid-point	frequency	mid-point x freq.
$11 \leq a < 12$	11.5	42	483
$12 \leq a < 13$	12.5	38	475
$13 \leq a < 14$	13.5	45	607.5
$14 \leq a < 15$	14.5	38	551
	totals	163	2116.5

(a) $13 \leq a < 14$

(b) 13 years old

(c) 12.98 years old

3.

class interval	mid-point	frequency	mid-point x freq.
$0 \leq v < 5$	2.5	5	12.5
$5 \leq v < 10$	7.5	47	352.5
$10 \leq v < 15$	12.5	11	137.5
	totals	63	502.5

(a) $5 \leq v < 10$

(b) 8 visits

(c) 7.98 visits