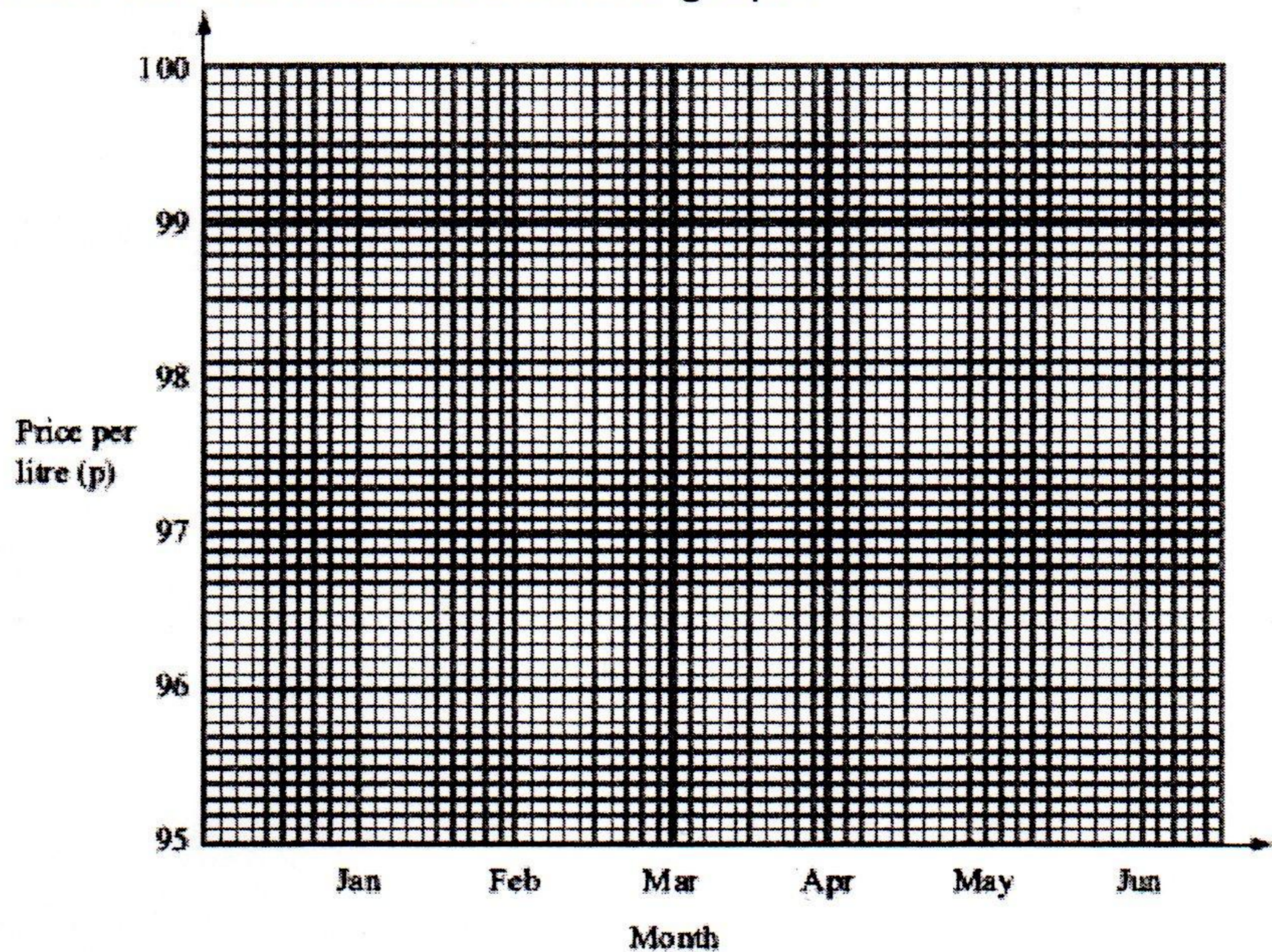


Drawing graphs and frequency polygons

1) Hassan is collecting information about the price of petrol during a 6-month period. His results are shown in the table.

Month	Jan	Feb	Mar	Apr	May	Jun
Price per litre (p)	96.1	96.2	97.3	97.7	98.3	99.1

Show this information as a line graph.

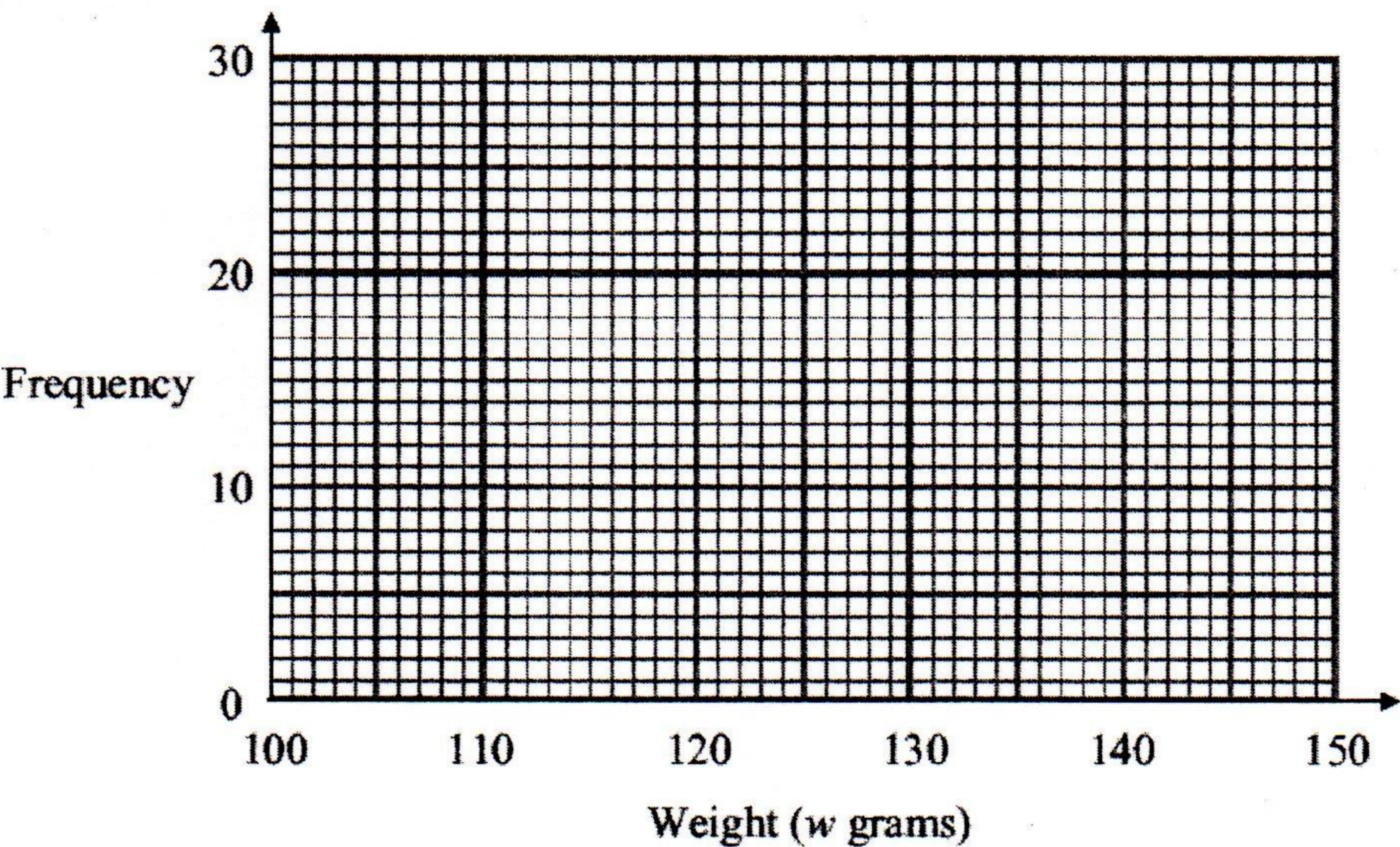


2) The table shows some information about the weights (w grams) of 60 apples.

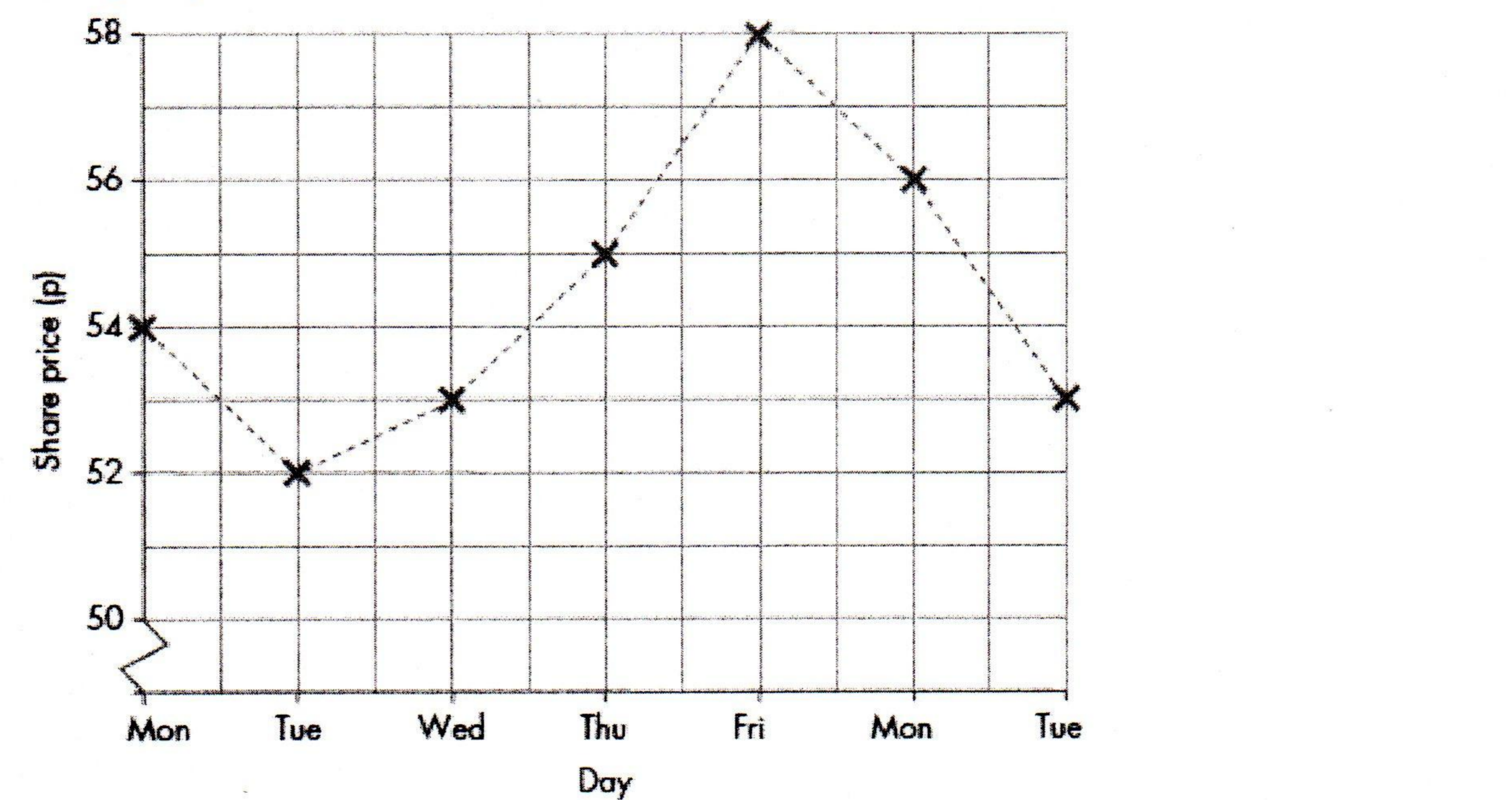
Weight (w grams) Frequency

$100 \leq w < 110$	5
$110 \leq w < 120$	9
$120 \leq w < 130$	14
$130 \leq w < 140$	24
$140 \leq w < 150$	8

Draw a frequency polygon to show his information.



3) This line graph shows the value of Spevadon shares on seven consecutive trading days.



- a On which day did the share price have its lowest value and what was that value? _____
- b By how much did the share price rise from Wednesday to Thursday? _____
- c Which day had the greatest rise in the share price from the previous day? _____
- d Mr Hardy sold 500 shares on Friday. How much profit did he make if he originally bought the shares at 40p each? _____

4) The table shows the population of a town, rounded to the nearest thousand, after each census.

Year	1941	1951	1961	1971	1981	1991	2001
Population (1000s)	12	14	15	18	21	25	23

- a Draw a line graph for the data.
- b From your graph estimate the population in 1966. _____
- c Between which two consecutive censuses did the population increase the most? _____
- d Can you predict the population for 2011? Give a reason for your answer. _____

Relative Frequency

The probability of something happening

=Number of times it happened / Number of times one's tried

1) Mr Ali has a mixed colour pack of seeds. He plants 10 seeds each week for 7 weeks.

a. Work out relative frequency of a purple flower.

week	1	2	3	4	5	6	7
No. of purple flower	4	6	5	7	4	6	5
Relative frequency	4/10						

b. Find the best estimate of the probability of getting a purple flower.

2) An ordinary six-sided dice is repeatedly thrown 10 times. The number of sixes are counted for each set of 10 throws. The table shows the results.

Set of 10 throws	Number of sixes	Total number of sixes	Total number of throws	Relative frequency
1 st	2	2	10	0.20
2 nd	3	5	20	0.25
3 rd	4	9	30	0.30
4 th	3	12	40	0.30
5 th	2	14	50	0.28
6 th	4	18	60	0.30
7 th	4	22	70	0.31
8 th	2		80	
9 th	3		90	
10 th	4		100	

(a) Complete the table.

(b) Complete the relative frequency graph.

