

Name:

Exam Style Questions

## Composite Bar Charts



Equipment needed: Ruler, calculator, pencil and pen

### Guidance

1. Read each question carefully before you begin answering it.
2. Check your answers seem right.
3. Always show your workings

Video Tutorial

[www.corbettmaths.com/contents](http://www.corbettmaths.com/contents)

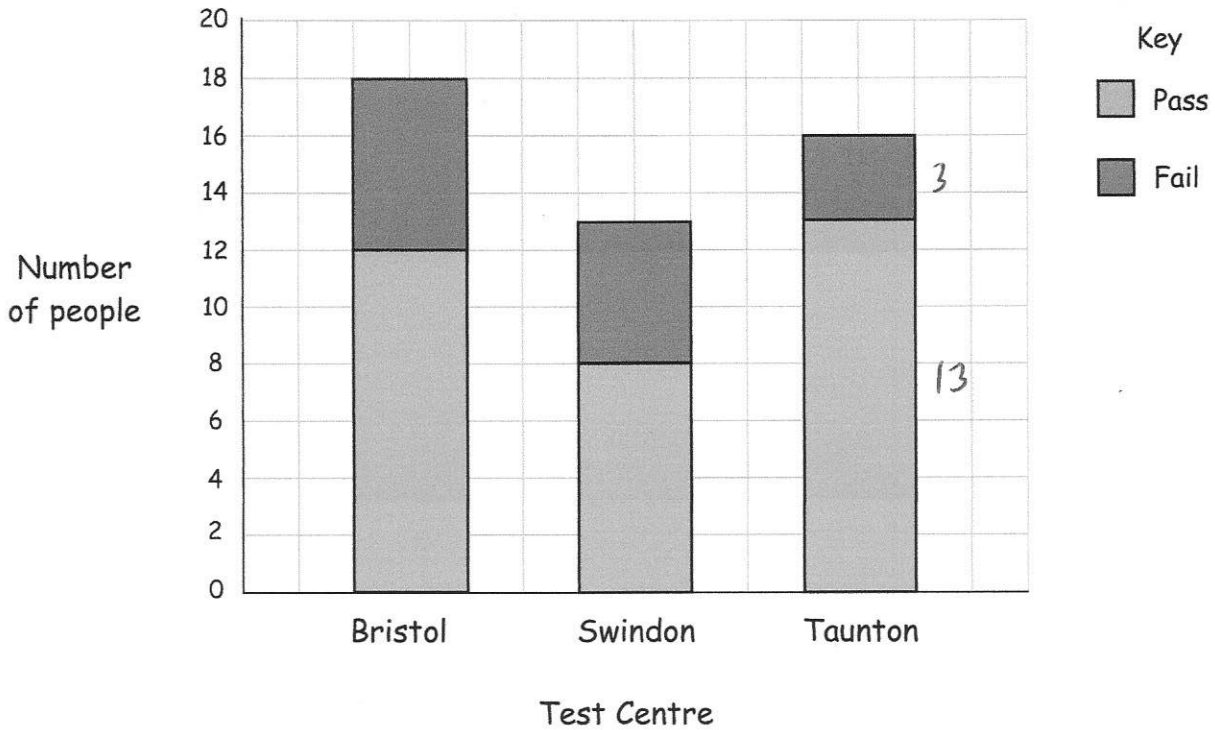
Video 148a



Answers and Video Solutions



1. The composite bar chart shows the results of driving tests one morning in three different test centres.



- (a) How many people passed their driving test at the Bristol test centre?

.....12.....  
(1)

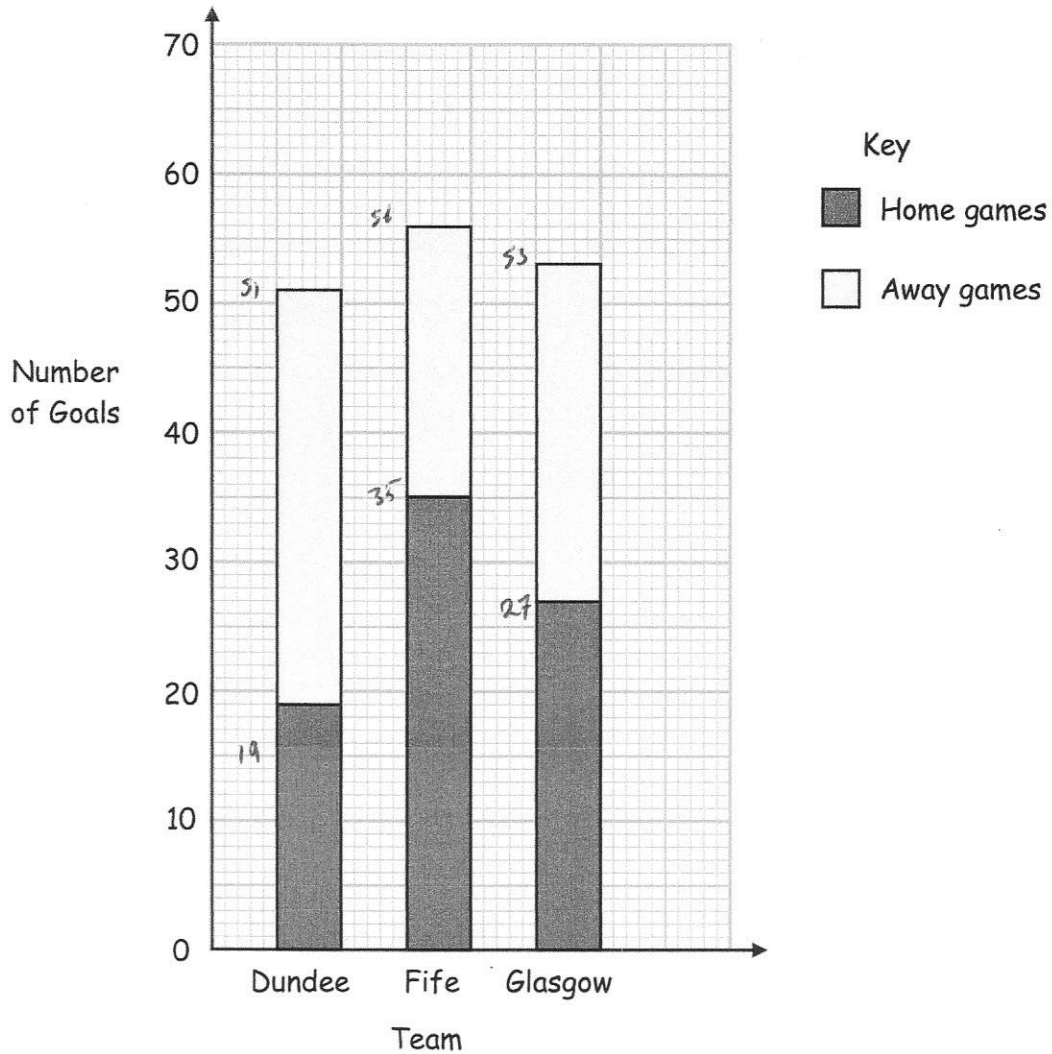
- (b) How many people failed their driving test at the Taunton test centre?

.....3.....  
(1)

- (c) How many people sat their driving test at the Swindon test centre?

.....13.....  
(1)

2. The composite bar chart shows information about the goals scored by three ice hockey teams.



- (a) How many goals did Glasgow score in **home** games?

..... 27 .....  
(1)

Shona says that Fife scored the most goals in **away** games. *at of the three teams*

- (b) Do you agree?  
Explain your answer.

Dundee:  $51 - 19 = 32$   
 Fife:  $56 - 35 = 21$   
 Glasgow:  $53 - 27 = 26$

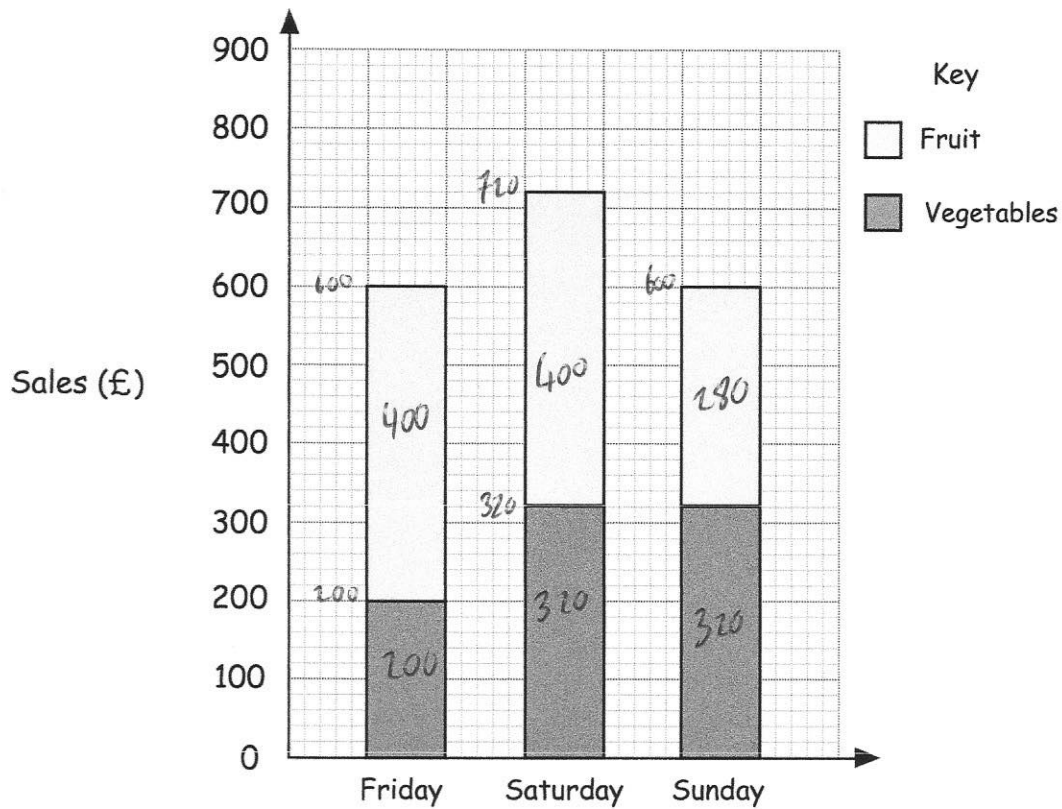
..... No, Dundee scored the most goals in away games (32).  
 .....

(1)

3. A greengrocer records her sales of fruit and vegetables.



She draws a composite bar chart to represent the data.



(a) On which two days were the total sales the same?

*Friday* ..... and *Sunday* ..... (1)

(b) On which two days were the sales from fruit the same?

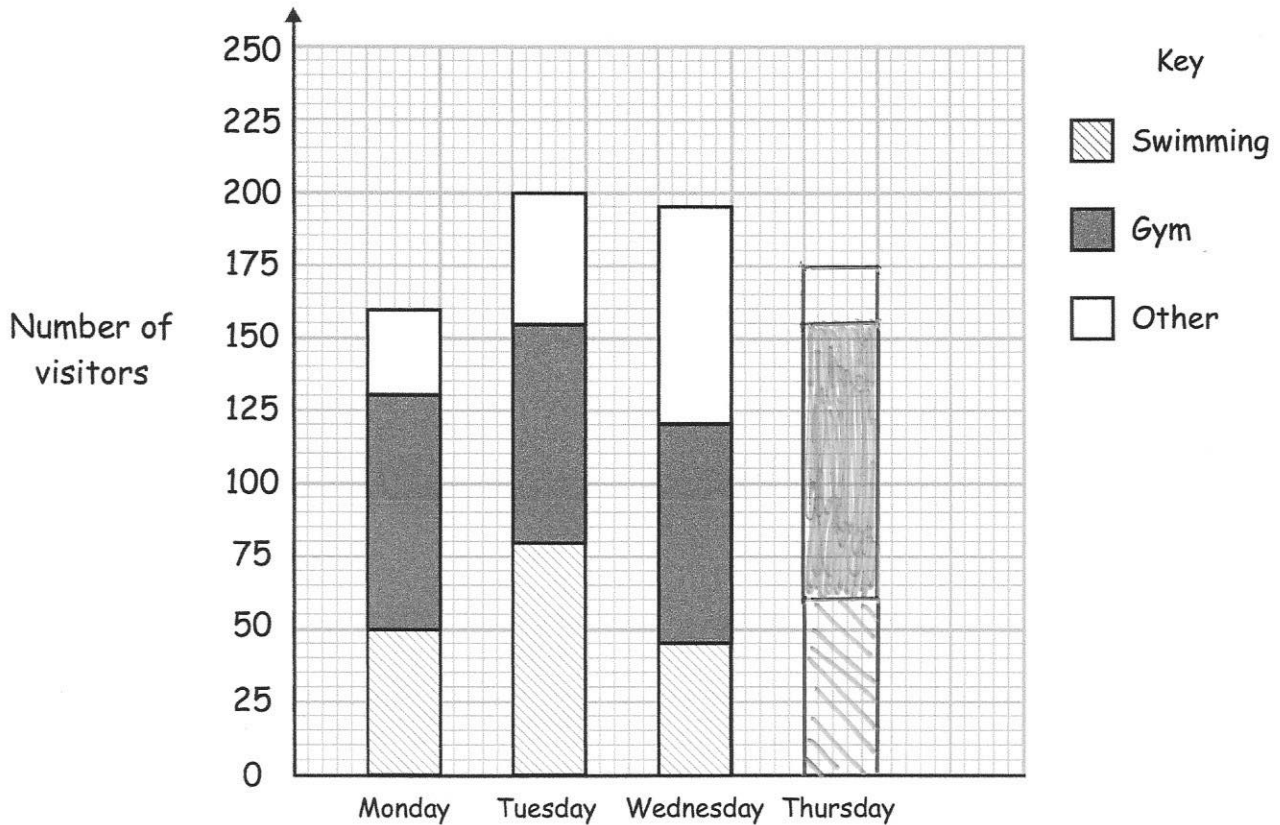
*Friday* ..... and *Saturday* ..... (1)

4.



Jayne records information about the activities completed by visitors to a leisure centre.

The composite bar chart shows her results.



On Thursday, 60 people went swimming, 95 went to the gym and 20 took part in other activities.

(a) Show this information on the chart.

(1)

(b) Over the four days, what fraction of the visitors went swimming?

$$\text{total: } 160 + 200 + 195 + 175 = 730$$

$$\text{swimming: } 50 + 80 + 45 + 60 = 235$$

$$\frac{235}{730} = \frac{47}{146}$$

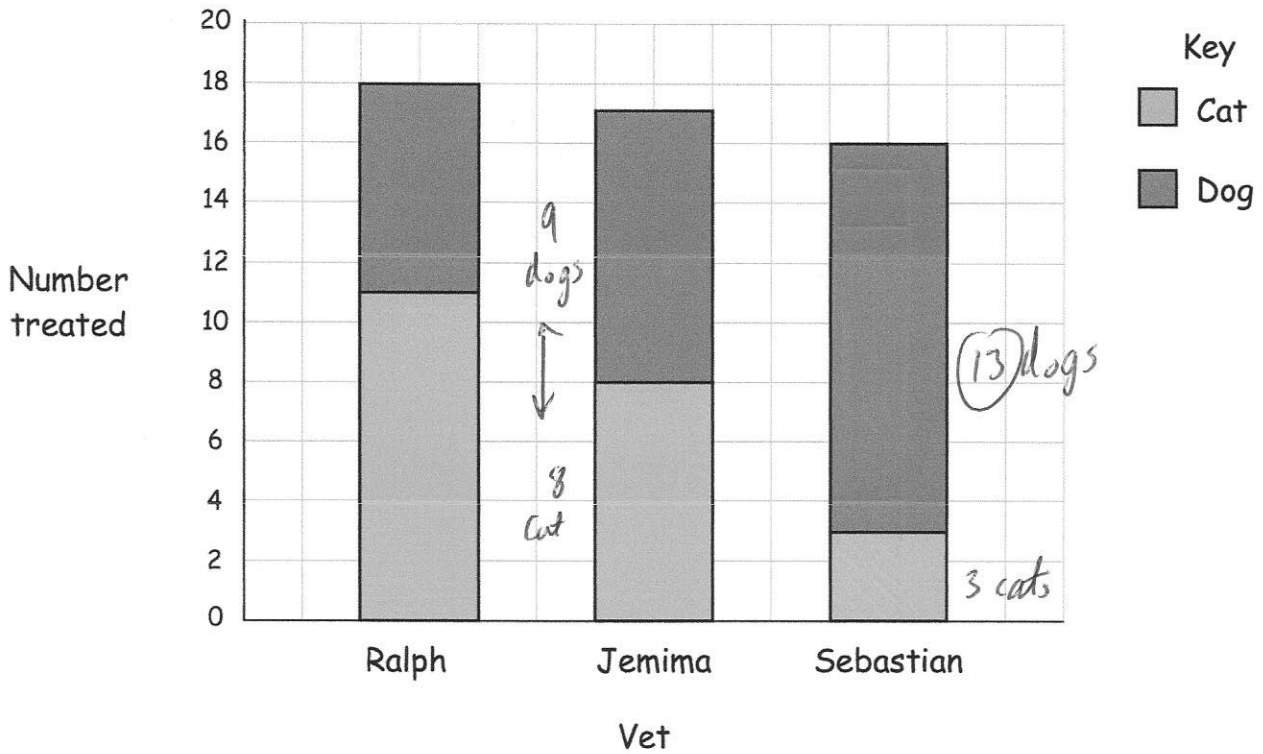
$$\frac{47}{146}$$

(3)

5. The table shows the number of cats and dogs treated yesterday by 3 vets.

| Vet       | Cats | Dogs |
|-----------|------|------|
| Ralph     | 11   | 7    |
| Jemima    | 9    | 8    |
| Sebastian | 3    | 16   |

Ralph then used the data from the table to draw this composite bar chart.



Write down two things that are wrong with this chart.

Mistake 1:

Jemima's bar reads 9 dogs and 8 cats, however it should be 9 cats and 8 dogs.

Mistake 2:

Sebastian's section for dogs is not large enough - it should be 16 not 13.

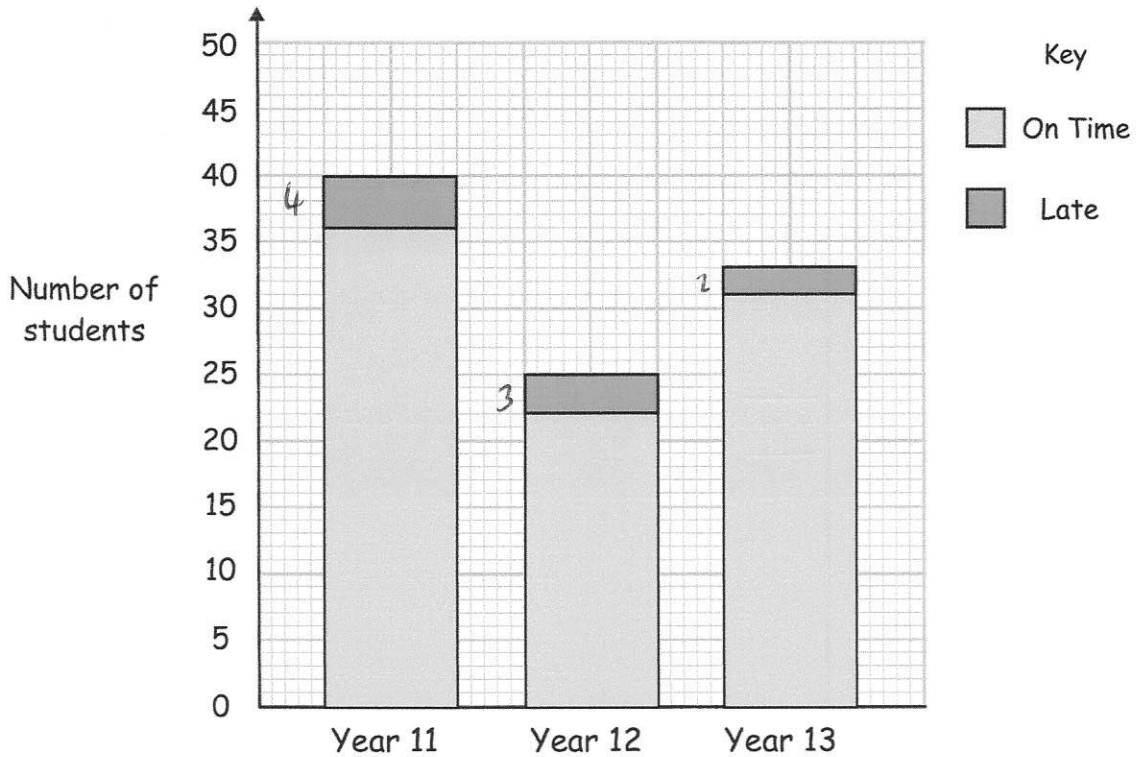
(2)

6.



Mr Brooks records information on whether students handed in their homework on time or late.

The composite bar chart shows his results.



(a) Work out the number of students who were late handing in their homework.

$$4 + 3 + 2 = 9$$

9

(1)

(b) Which year group had the greatest percentage of students who were late handing in their homework?

You must show your working.

$$\text{year 11} \quad \frac{4}{40} = 10\%$$

$$\text{year 12} \quad \frac{3}{25} = 12\%$$

$$\text{year 13} \quad \frac{2}{33} = 6.0606\dots\%$$

Year 12

(3)

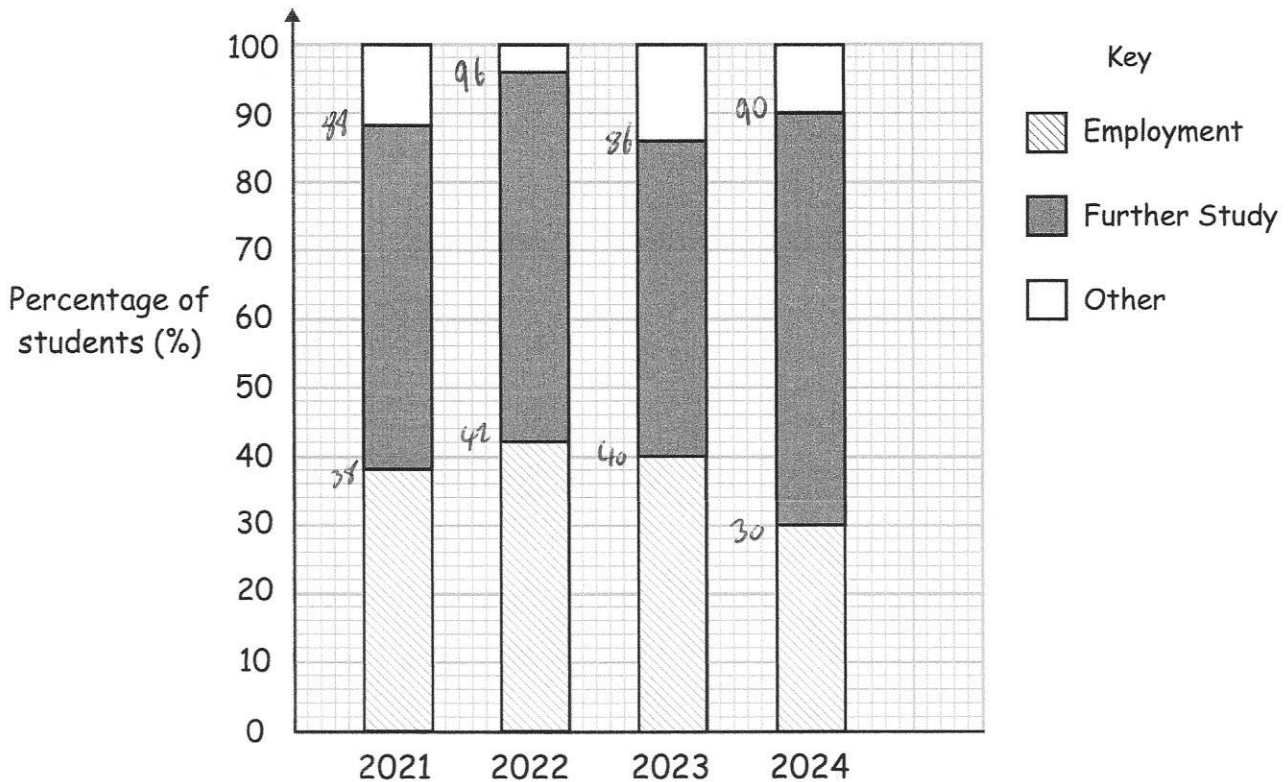
7.



The table shows the number of students leaving the secondary schools in a town over four years.

| Year             | 2021 | 2022 | 2023 | 2024 |
|------------------|------|------|------|------|
| Students Leaving | 1800 | 1800 | 1700 | 1650 |

The composite bar chart shows the destinations of the students.



Work out the total number of students who entered further study over the four years.

| Year | Further study (%) | Number of students | Method                   |
|------|-------------------|--------------------|--------------------------|
| 2021 | 50%               | 900                | $1800 \div 2 = 900$      |
| 2022 | 54%               | 972                | $1800 \times 0.54 = 972$ |
| 2023 | 46%               | 782                | $1700 \times 0.46 = 782$ |
| 2024 | 60%               | 990                | $1650 \times 0.6 = 990$  |
|      |                   | <u>3644</u>        |                          |

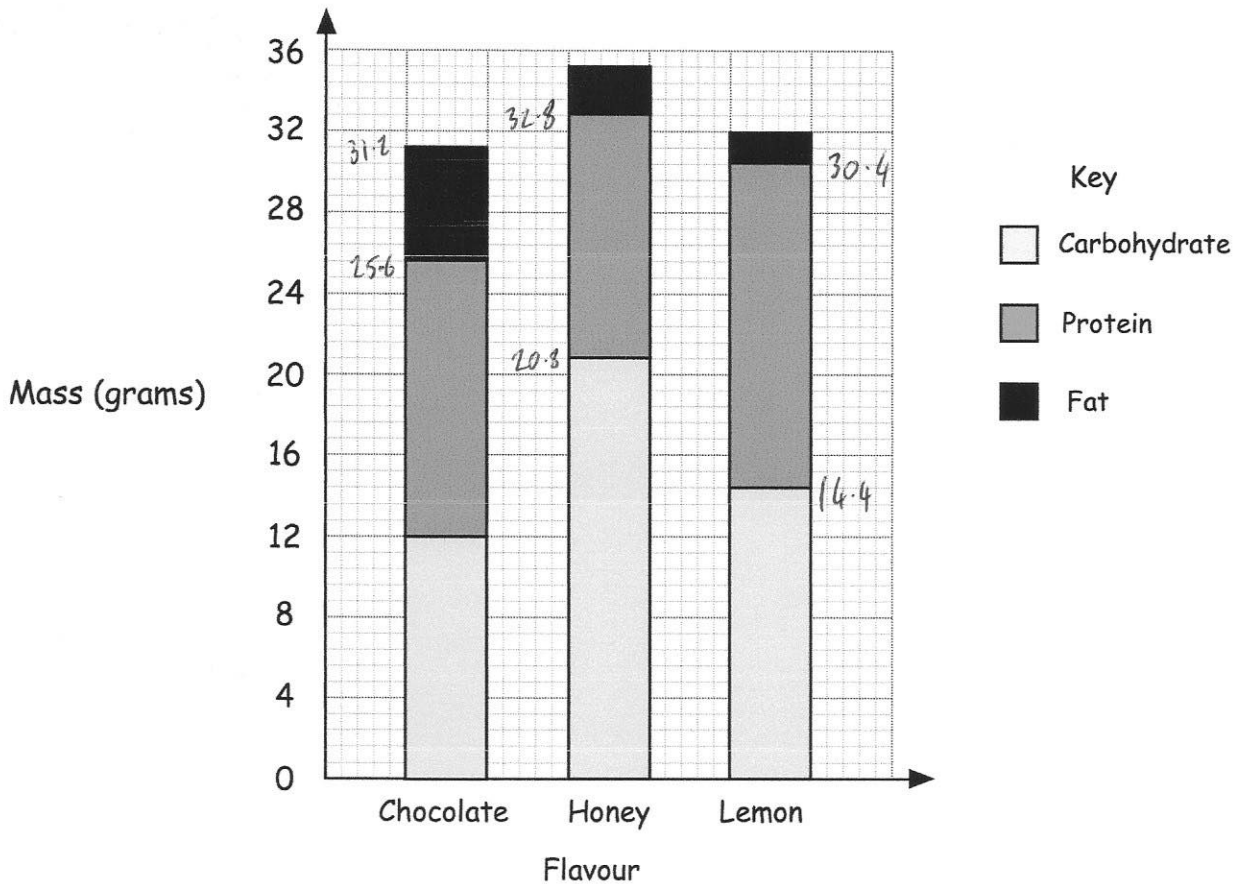
3644

(5)

8. A company has created three flavours of snack.



The composite bar chart shows some information about the number of grams of carbohydrate, protein and fat in each snack.



(a) How many grams of fat are there in the chocolate flavoured snack?

$$31.2 - 25.6 = 5.6g$$

$$\begin{array}{r} 5.6g \\ \hline \end{array} \quad (1)$$

(b) Find the ratio of the number of grams of protein in the honey flavoured snack to the number of grams of protein in the lemon flavoured snack.

$$\begin{aligned} \text{Lemon} &: 30.4 - 14.4 = 16g \\ \text{Honey} &: 32.8 - 20.8 = 12g \end{aligned}$$

$$\begin{aligned} 12 &: 16 \\ 3 &: 4 \end{aligned}$$

$$\begin{array}{r} 3:4 \\ \hline \end{array} \quad (3)$$