Time for Tea at Wimbledon Answers

Catering

Wimbledon (3rd -16th July 2017, except Sunday 9th) is the largest single annual sporting catering operation carried out in Europe. Average quantities supplied by the caterers are as follows:

- 330 000 cups of tea

- 320 000 glasses of Pimm's

- 234 000 roast dinners

- 230 000 bottles of water

- 110 000 pints of draught beer and lager

- 86 000 ice creams

- 76 000 sandwiches

- 30 000 pizzas

- 29 000 bottles of champagne

- 25 000 scones

- 16 000 portions of fish and chips

- 10 000 portions of frozen yoghurt

1. Complete the table below to show the mean daily consumption of each food or drink.
   Divide each value by 13 (The caterers are only open 13 days as no matches are played on the second Sunday)

Food and Drink	Daily Estimate
330 000 cups of tea	**25 385**
320 000 glasses of Pimm's	**24 615**
234 000 roast dinners	**18 000**
230 000 bottles of water	**17 692**
110 000 pints of draught beer and lager	**8462**
86 000 ice creams	**6615**
76 000 sandwiches	**5846**
30 000 pizzas	**2308**

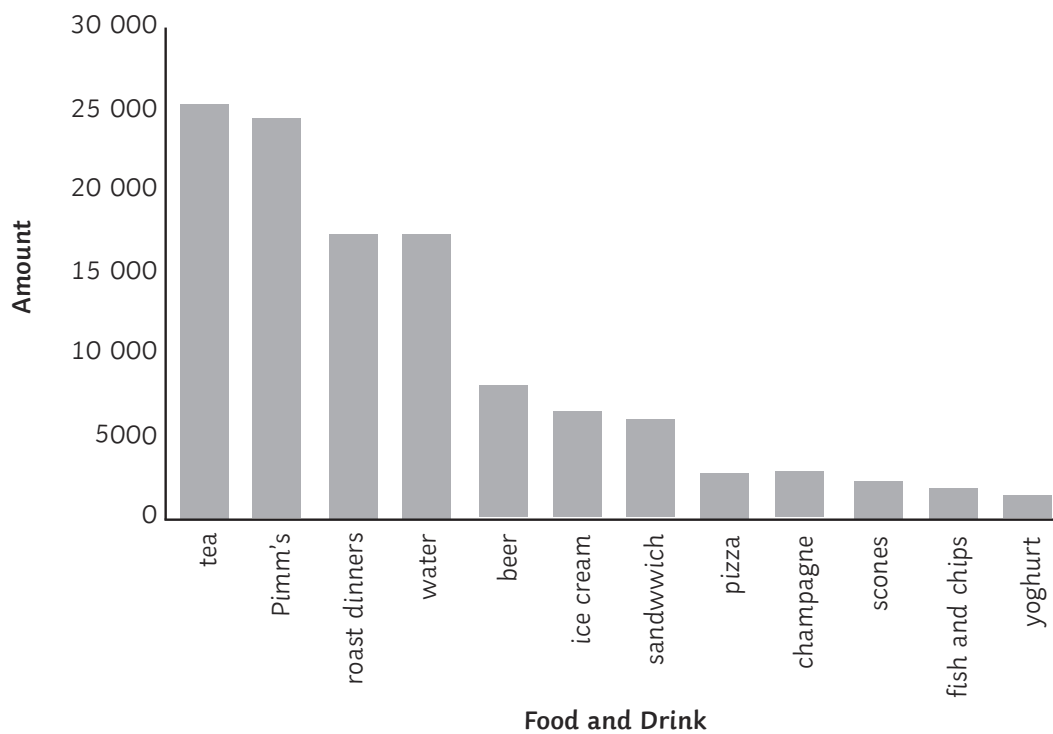| 29 000 bottles of champagne	**2231**
25 000 scones	**1923**
16 000 portions of fish and chips	**1231**
10 000 portions of frozen yoghurt	**769**

2. Which drink is the most popular?

tea

3. Which food is the most popular?

roast dinners

4. Create a bar chart to show the average daily food and drink sales for each category given.

5. For each item of food and drink, express each quantity as a proportion of the total, in decimal and percentage form.
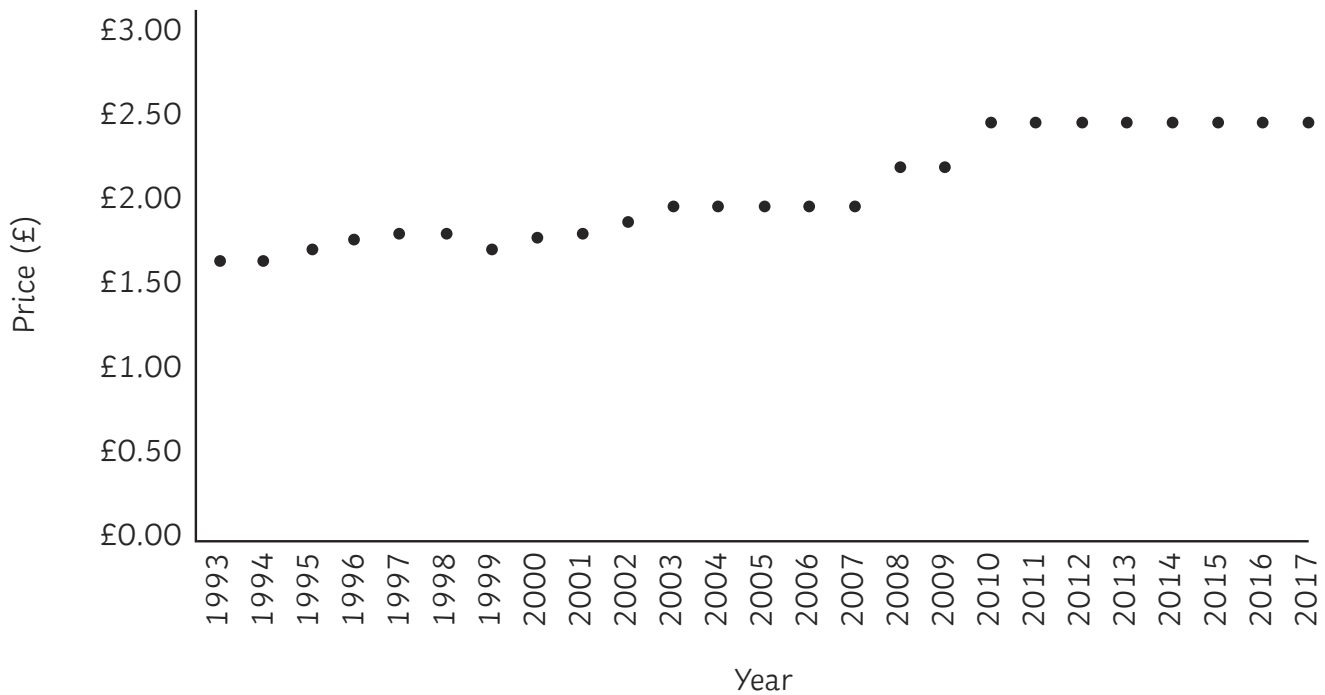
Food and Drink	Decimal	Percentage
330 000 cups of tea	**0.2206**	**22.06**
320 000 glasses of Pimm's	**0.2139**	**21.39**
234 000 roast dinners	**0.1564**	**15.64**
230 000 bottles of water	**0.1537**	**15.37**
110 000 pints of draught beer and lager	**0.0735**	**7.35**
86 000 ice creams	**0.0575**	**5.75**
76 000 sandwiches	**0.0508**	**5.08**
30 000 pizzas	**0.0201**	**2.01**
29 000 bottles of champagne	**0.0194**	**1.94**
25 000 scones	**0.0167**	**1.67**
16 000 portions of fish and chips	**0.0107**	**1.07**
10 000 portions of frozen yoghurt	**0.0067**	**0.67**

28 000 kg of strawberries are sold each year served with 10 000 litres of cream.

The price of strawberries and cream has changed over the years at Wimbledon.

1993-94	£1.70	2001	£1.85
1995	£1.75	2002	£1.95
1996	£1.80	2003-07	£2.00
1997-98	£1.85	2008-09	£2.25
1999	£1.75	2010-17	£2.50
2000	£1.80		

6. Create a line graph to show the change in price of strawberries and cream

7. Work out the mean, median, mode and range for the cost of strawberries and cream

Median: £2.00

Mode: £2.50 (8 years)

Mean: £52.50 ÷ 25 = £2.10

Range: £0.80

8. Show the ratio of strawberries (kg) to cream (ml) in its simplest form

28 000kg:10 000l = 14kg:5l