

Tabulation and Representation of data – GCSE Statistics**1. No.5**

Jack is wondering whether he gets value for money from his subscription to a sports channel.

He records the number of live football matches he watches for each of the 40 weeks in the season.

Some of his results are shown in the table.

Number of matches watched in a week		Frequency
0		3
1		
2		18
3		7
4		4

- (a) Complete the table by filling in the **three** empty cells correctly.

[3 marks]

- (b) Jack chooses one of the 40 weeks at random.

- (b) (i) What is the probability he chooses a week in which he watched **five** matches?

[1 mark]

Answer _____

- (b) (ii) What is the probability he chooses a week in which he watched exactly **two** matches?

[2 marks]

Answer _____

- (b) (iii) What is the probability he chooses a week in which he watched at least three matches? [1 mark]

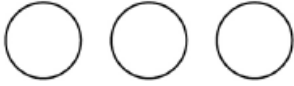
Answer _____

2. No.6

Ronnie and Lewis are looking for new cushions for their living room.

They record the colour of each cushion they like.

The pictogram shows some of this information.

Red	
Brown	
White	
Multi-coloured	

Key:  represents 4 cushions

- (a) How many **more** brown cushions than red cushions do they like?

[2 marks]

Answer _____

- (b) They liked 10 different **multi-coloured** cushions.

Complete the pictogram to show this information.

[2 marks]

- (c) Assume that they decide to buy one of the cushions represented in the pictogram.

- (c) (i) What is the probability that they buy a **white** cushion?

[3 marks]

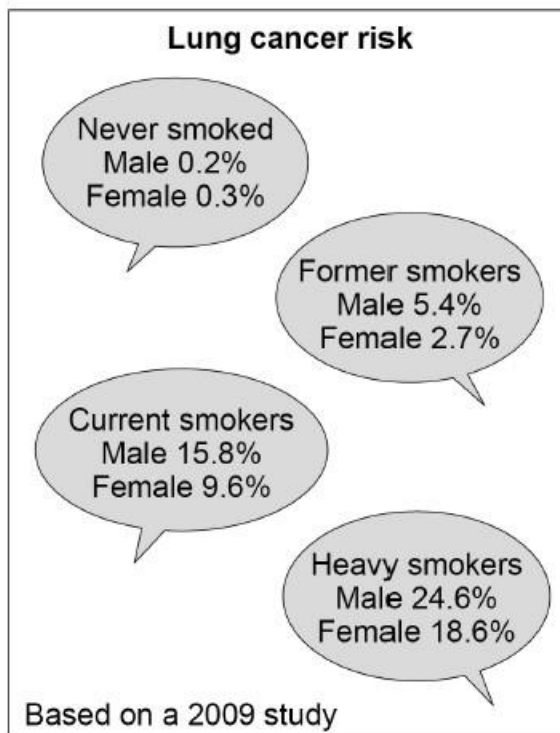
Answer

- (c) (ii) What **other** assumption did you have to make to answer **part (c)(i)**?

[1 mark]

3. No.7

This picture gives the risk of getting lung cancer and how smoking changes that risk.



- (a) How many out of every 1000 women who have **never smoked** are expected to get lung cancer?

[2 marks]

Answer _____

- (b) How many times greater is the risk of getting lung cancer for a man who is a **heavy smoker** compared with a man who has **never smoked**?

[2 marks]

Answer _____

- (c) Give **two** reasons why the picture might not be that helpful for someone to estimate their risk of lung cancer now.

[2 marks]

1 _____

2 _____

4. No.2

Which of these is **not** a type of statistical experiment?

Circle your answer.

[1 mark]

field

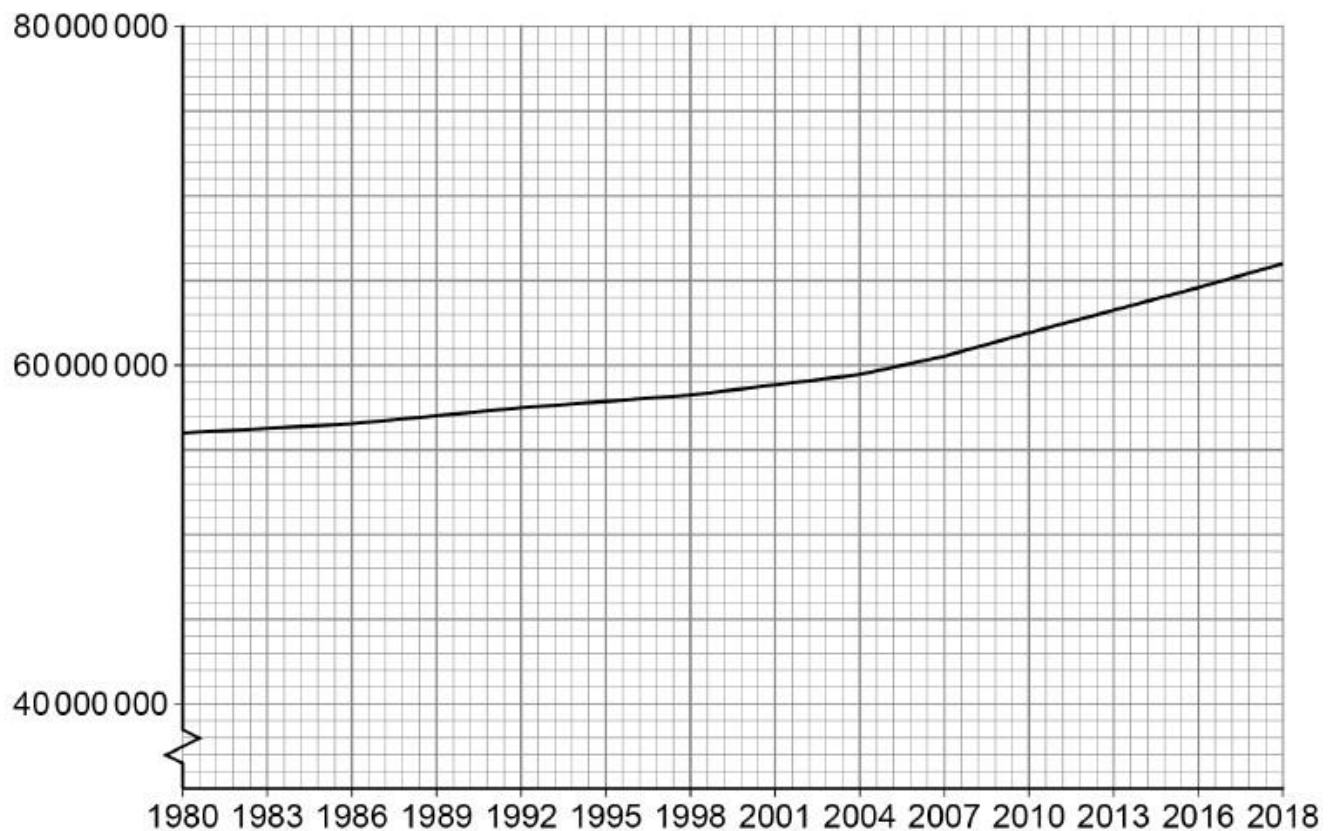
classroom

laboratory

natural

5. No.5

The graph shows the UK population from 1980 to 2018.



Source: ONS

(a) What was the UK population in 2018?

[1 mark]

Answer _____

(b) Describe the general trend in the UK population during these years.

[1 mark]

(c) In which year did the UK population reach 60 million?

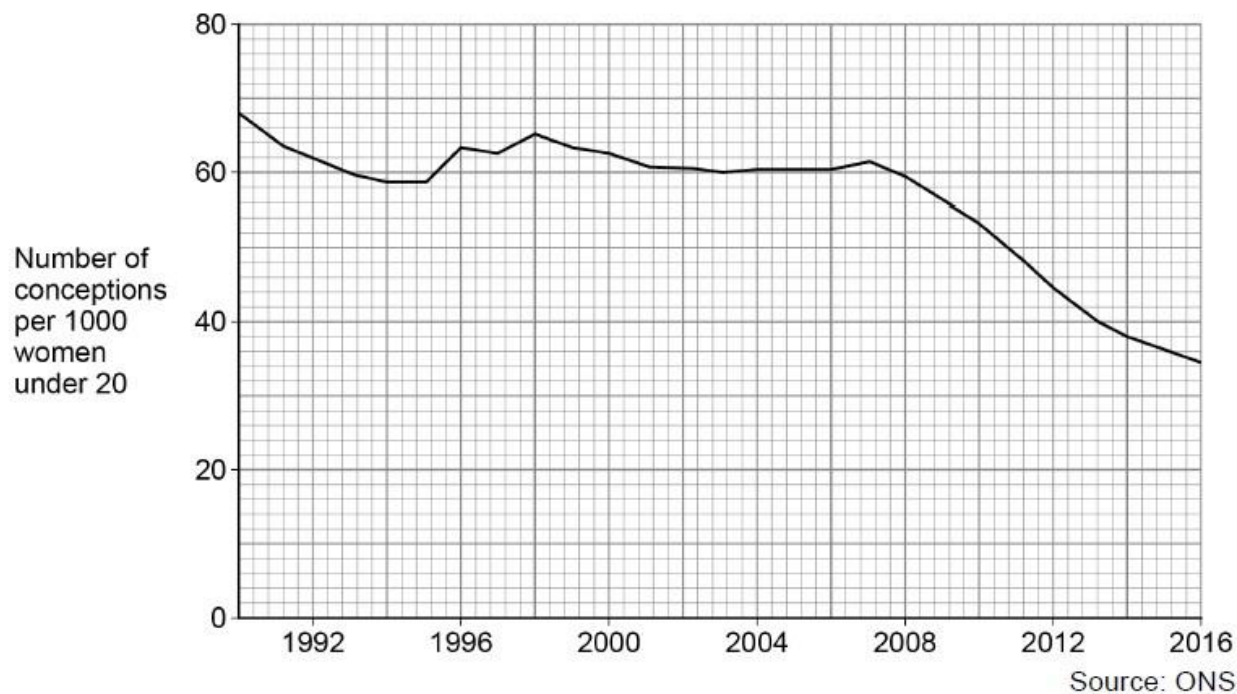
[1 mark]

Answer _____

6. No.14

The graph shows the number of conceptions per 1000 women under 20 in England and Wales.

A conception is when a woman becomes pregnant.



(a) (i) Make **two** comments about the patterns in the data.

[2 marks]

Comment 1 _____

Comment 2 _____

(a) (ii) Give **one** possible reason for the overall trend in the data.

[1 mark]

- (b) Draw lines to connect the statements with whether they are likely to be correct or not.
[2 marks]

Less than 5% of women
under 20 became
pregnant in 2012

Definitely correct

There were fewer than 40
babies born to women
under 20 in 2016

Probably correct

Fewer women under 21
became pregnant in 2016
compared to 1992

Definitely incorrect

7. No.4

Which of these is **not** a characteristic of the Normal distribution?

Circle the letter of your answer.

[1 mark]

- A The distribution is symmetric
- B The distribution is bell-shaped
- C mean = median = mode
- D mean = standard deviation