



S23-10min Relative and Expected Frequency: 10-minute Pack

EDEXCEL 1ST0 · Calculator allowed · about 10 minutes

Total Marks

Name: _____ Date: ____ / ____ / ____

Answer ALL questions. Show all your working.

- 1** An ordinary fair six-sided dice is rolled 40 times. The table shows the number of times each score occurs.

Score	1	2	3	4	5	6
Frequency	5	7	6	8	9	5

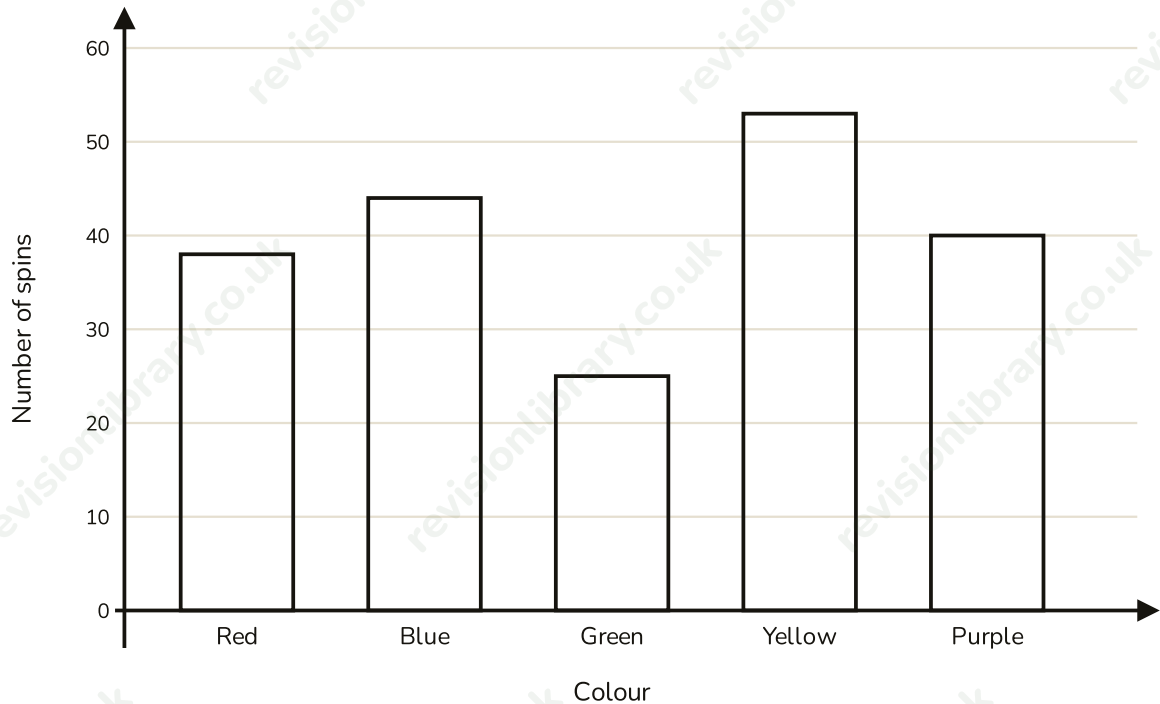
- (a) Write down the total number of trials shown in the table. (1)

- (b) Calculate the relative frequency of rolling a 5. Give your answer as a decimal. (2)

- (c) Write down which score has the highest relative frequency. (1)

(Total for Question 1 is 4 marks)

- 2** The bar chart shows the results when a four-colour spinner (red, blue, green and yellow) was spun 200 times.



- (a)** Calculate the relative frequency of the spinner landing on yellow. Give your answer as a decimal. **(2)**
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- (b)** Write down which colour was the least likely outcome in these 200 spins. **(1)**
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- (c)** Using the relative frequency from part (a), estimate how many times the spinner would land on yellow in 500 spins. **(2)**

(Total for Question 2 is 5 marks)

Mark scheme · S23-10min Relative and Expected Frequency: 10-minute Pack

Question 1

- (a) **B1** 40 cao
- (a) **Answer: 40**
- (b) **M1** $9/40$, oe
- (b) **A1** 0.225 cao
- (b) **Answer: 0.225**
- (c) **B1** 5 cao
- (c) **Answer: 5**

Question 2

- (a) **M1** $53/200$, oe
- (a) **A1** 0.265 cao
- (a) **Answer: 0.265**
- (b) **B1** Green cao
- (b) **Answer: Green**
- (c) **M1** 500×0.265 , oe
- (c) **A1** 132.5 cao, accept 132 or 133
- (c) **Answer: 132.5 (accept 132 or 133)**