

# **GCSE Exam Questions**

### Probability Scale | Probability



#### GCSE Exam Questions: Probability Scale

1) A bag contains 8 counters.

1 of the counters is red, 2 are blue and the rest are yellow.



The diagram shows a probability scale.



Which arrow shows the probability of

- (a) Picking a red counter
- (b) Picking a yellow counter
- (c) Picking a green counter

(1)

(1) (3 marks)



#### GCSE Exam Questions: Probability Scale

2) A fair spinner has six sides. They are labelled 1, 1, 1, 2, 2, 3.



The diagram shows a probability scale.



Which arrow shows the probability of

- (a) Scoring a 3
- (b) Scoring a number greater than 1
- (c) Scoring a number less than 4

(1)



(1) (3 marks)



(2)

#### GCSE Exam Questions: Probability Scale

3) (a) Sandy has three coats. Each day she wears a coat.

The table shows the probability that Sandy wears a coat of a particular colour.

Coat	Red	Blue	Black
Probability	0.2	0.35	

Work out the probability that she wears a black coat.

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(b) Work out the probability that she wears a red or a black coat.

(2) (4 marks)

4) (a) A fair spinner has five sections. The sections are labelledA, B or C. The diagram shows a probability scale.



The scale shows the probability that the spinner will land on **A**. How many of the five sections are labelled **A**?

..... sections (3)

(b) The probability of spinning an A is three times the probability of spinning a C. The spinner is spun 100 times.

Calculate many times would you expect it to land on a C?

(3) (6 marks)



#### **GCSE Exam Questions: Probability Scale Answers**

	Question	Answer	Marks
1)	A bag contains 8 counters.		
	Which arrow shows the probability of		
(a)	Picking a red counter	(a) <i>B</i>	(1)
(b)	Picking a yellow counter	(b) D	(1)
(c)	Picking a green counter	(c) A	(1)



#### **GCSE Exam Questions: Probability Scale Answers**

	Question	Answer	Marks
2)	A fair spinner has six sides. They are labelled 1, 1, 1, 2, 2, 3.		
	$\begin{array}{c c}1 & 1 \\ 1 & 1 \\ \hline 3 & 2 \\ 2 \end{array}$		
	The diagram shows a probability scale.		
	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		
	0 0.5 1		
(a)	Scoring a 3	(a) <i>B</i>	(1)
(b)	Scoring a number greater than 1	(b) C	(1)
(c)	Scoring a number less than 4	(c) E	(1)
3) (a)	Sandy has three coats. Each day she wears a coat. The table shows the probability that Sandy wears a coat of a particular colour.	(a) $1 - (0.2 + 0.25)$ = 0.45	(1) (1)
	Coat Red Blue Black   Buskshilts 0.2 0.25 0.25		
	Work out the probability that she wears a black coat.		
(b)	Work out the probability that she wears a red or a black coat.	<b>(b)</b> $0.2 + 0.45$ = 0.65	(1) (1)



#### **GCSE Exam Questions: Probability Scale Answers**

	Question	Answer	Marks
4) (a)	A fair spinner has five sections. The sections are labelled A, B or C. The diagram shows a probability scale. A $\downarrow$ $\downarrow$ $\downarrow$ $\downarrow$ $\downarrow$ $\downarrow$ $\downarrow$ $\downarrow$ $\downarrow$ $\downarrow$	(a) Probability of A is 0.6 $0.6 \times 5$ = 3	(1) (1) (1)
(b)	The probability of spinning an <b>A</b> is three times the probability of spinning a <b>C</b> . The spinner is spun 100 times. Calculate many times would you expect it to land on a <b>C</b> ?	(b) $3 \div 3 = 1$ yellow or $\frac{1}{5}$ yellow $\frac{1}{5} \times 100$ = 20	<ul><li>(1)</li><li>(1)</li><li>(1)</li></ul>

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