



BOOSTER WORKBOOK

Statistics S4

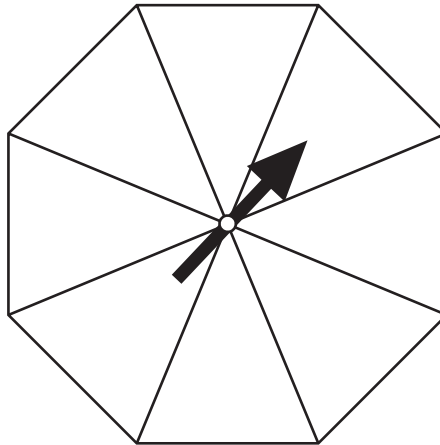
Probability *

*** Not assessed at KS2**

1

Here is a spinner which is a regular octagon.

Write 1, 2 or 3 in each section of the spinner so that **1 and 2 are equally likely** to come up and **3 is the least likely** to come up.

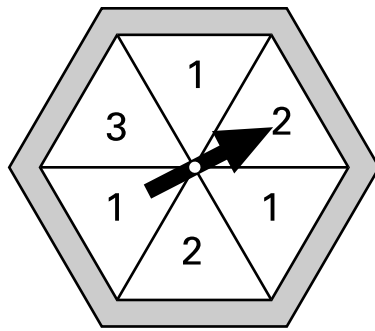


2 marks

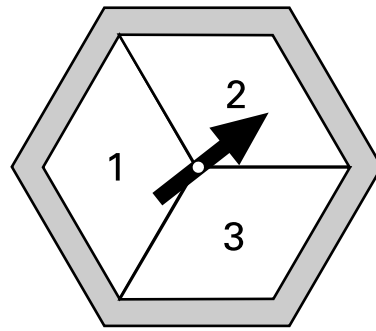
2

Here are two spinners, A and B.

Each one is a regular hexagon.



A



B

For each statement, put a **tick (✓)** if it is **true**.

Put a **cross (✗)** if it is **not true**.



Scoring '1' is more likely on A than on B.

Scoring '2' is more likely on A than on B.

Scoring '3' is as equally likely on A as on B.

1 mark

Zara spins both spinners.

The score on A is added to the score on B.

She says,

'The sum of the scores on both spinners is certain to be less than 7'.

Is she correct?
Circle Yes or No.



Yes / No

Explain how you know.



.....

.....

.....

3

Sapna makes up a game using seven cards.

Here are the cards.



Josh picks a card without looking.

If Josh picks an **odd** number then Sapna scores a point.

If Josh picks an **even** number then Josh scores a point.

Is this a fair game?
Circle Yes or No.



Yes / No

Explain how you know.



.....

.....

.....

1 mark

4

Dan has a bag of seven counters numbered **1 to 7**

Abeda has a bag of twenty counters numbered **1 to 20**

Each chooses a counter from their own bag without looking.

For each statement, put a tick (✓) if it is **true**.

Put a cross (✗) if it is **not true**.



Dan is **more likely** than Abeda to choose a '**5**'

They are both **equally likely** to choose
a **number less than 3**

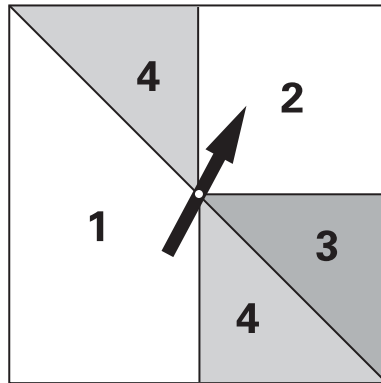
Dan is **more likely** than Abeda to choose
an **odd number**.

Abeda is **less likely** than Dan to choose a '**10**'

2 marks

5

Here is a square spinner.



Look at these statements.

For each one put a tick (✓) if it is **correct**.
Put a cross (✗) if it is **not correct**.



'4' is the **most likely** score.

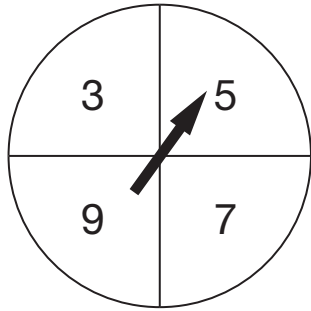
'2' and '4' are **equally likely** scores.

Odd and even scores are **equally likely**.

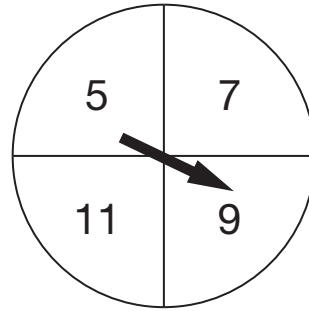
A score of '3' or more is **as likely as** a score of less than '3'.

2 marks

Here are two spinners, A and B.



A




B

Hassan spins the pointer on each spinner.

He adds his two scores together.

For each statement put a tick (✓) to show if it is **certain**, **possible** or **impossible**.

One has been done for you.

	certain	possible	impossible
 The total will be more than 15	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The total will be an even number.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The total will be less than 6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The score on A will be less than the score on B.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2 marks