

Probability iRA / tRA

Question 1

The chance of getting a number higher than 6 on a regular die is:

- A Likely
- B Certain
- C Unlikely
- D Impossible

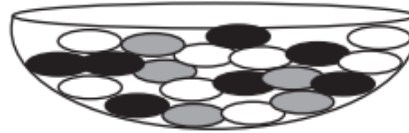


Question 2

Owen reaches into this dish without looking and picks out one pebble.

Owen is more likely to get

- A a black pebble than a white one.
- B a grey pebble than a black one.
- C a white pebble than a black one.
- D a grey pebble than a white one.



Question 3

This spinner is used in a board game.



Sanjay spins the arrow.

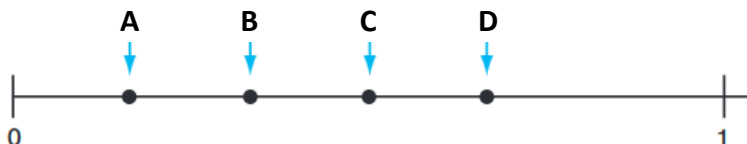
On which number is the arrow most likely to stop?

- A 1
- B 2
- C 3
- D 4

Question 4

Kim throws a standard 6-sided die.

Which point on the number line best shows the chance of Kim throwing a 2?



### Question 5

These were the top five names for boys born in Victoria in 2009.

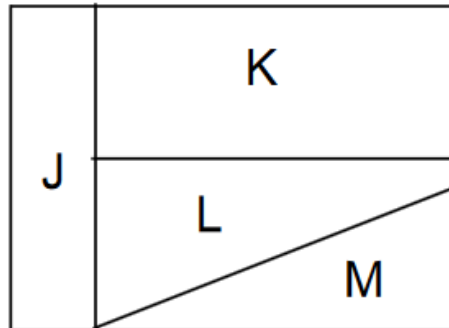
Name	Number of boys
William	549
Jack	534
Oliver	453
Joshua	443
Thomas	442

Which of these statements is **true** of a boy born in Victoria in 2009?

- A He is more likely to be named Jack than Joshua.
- B He is certain to be named William.
- C He is less likely to be named Oliver than Thomas.
- D It is impossible that he will be named Christopher.

### Question 6

Nina will throw a dart at this board without aiming, to hit a section with a letter on it. The letter on the section that Nina's dart is **most** likely to hit is

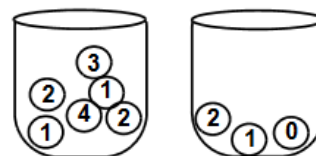


- J.                      K.                      L.                      M.
- A                      B                      C                      D

### Question 7

Paul takes one counter out of each jar without looking and adds their numbers together.

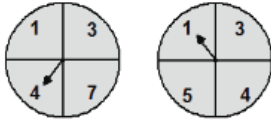
Which of these is **most** likely to be the sum of Paul's counters?



- A    1                      B    2                      C    3                      D    4

### Question 8

Marie spins these two arrows. She adds the numbers in the sections where the arrows stop and gets a total of 5.



Marie then spins the arrows again.

How many different ways can she get a total of 8?

- A 1                      B 2                      C 3                      D 4

### Question 9

A pack of cards contains the following:

10 red cards

14 blue cards

12 yellow cards

What is the chance of selecting a red or blue card?

$$\frac{1}{24}$$

A

$$\frac{1}{12}$$

B

$$\frac{1}{4}$$

C

$$\frac{2}{3}$$

D

### Question 10

The odd numbers between 10 and 30 are written on cards, one number to a card.

A card is drawn at random from this set.

What is the probability that the card shows a prime number?

$$\frac{3}{5}$$

A

$$\frac{3}{10}$$

B

$$\frac{7}{10}$$

C

$$\frac{7}{20}$$

D

**Question 11**

An octahedral die has its faces numbered from 1 to 8.

What is the probability of rolling a number less than 6 with this die?

$$\frac{1}{8}$$

A

$$\frac{1}{6}$$

B

$$\frac{5}{8}$$

C

$$\frac{3}{4}$$

D

**Question 12**

The following table is required for the next two questions. The table represents the number of medals won by the top three countries at the 2008 Olympic Games.

Medal Table				
	Gold	Silver	Bronze	Total
China	51	21	28	100
USA	36	38	36	110
Russia	23	21	28	72
Total	110	80	92	282

If all 282 medals are placed in a bag, what is the probability a gold medal from the USA would be drawn out the bag?

$$\frac{110}{282}$$

A

$$\frac{36}{282}$$

B

$$\frac{36}{110}$$

C

$$\frac{100}{282}$$

D

**Question 13**

A bag contains 3 red marbles, 5 white marbles and 2 blue marbles. Two white marbles are drawn from the bag and not replaced.

What is the probability the next marble drawn will be white?

A 5

B 3

C 0.5

D 0.375

Question 14

The following table displays the preferred sport for a certain school in each year. If a person was selected at random from all except the senior section, what is the probability they would be a Year 9 student who prefers tennis? (Round to 2 decimal places)

		Tennis	Soccer
Junior	Year 7	25	35
	Year 8	31	27
Middle	Year 9	22	40
	Year 10	33	22
Senior	Year 11	31	25
	Year 12	30	24

- A 0.09      B 0.06      C 0.20      D 0.25

Question 15

Voula spins the arrow 100 times.



Which table is most likely to show her results?

Shape section	Number of spins
+	15
▲	10
●	15
■	60

A

Shape section	Number of spins
+	10
▲	25
●	25
■	40

B

Shape section	Number of spins
+	25
▲	10
●	25
■	40

C

Shape section	Number of spins
+	25
▲	25
●	25
■	25

D