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11+ Familiarisation

Non-Verbal Reasoning
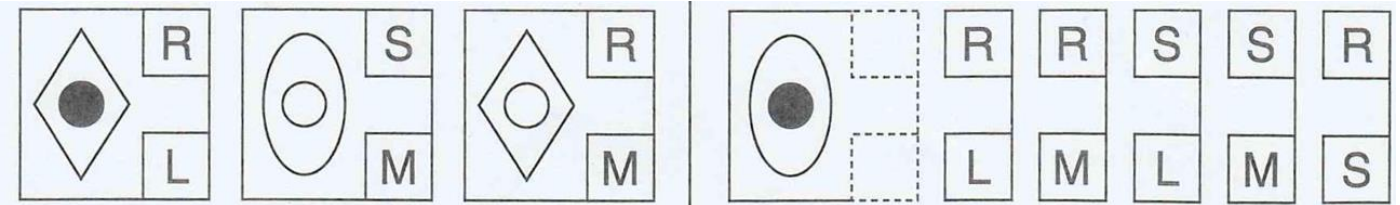
Saturday 3rd July 2021
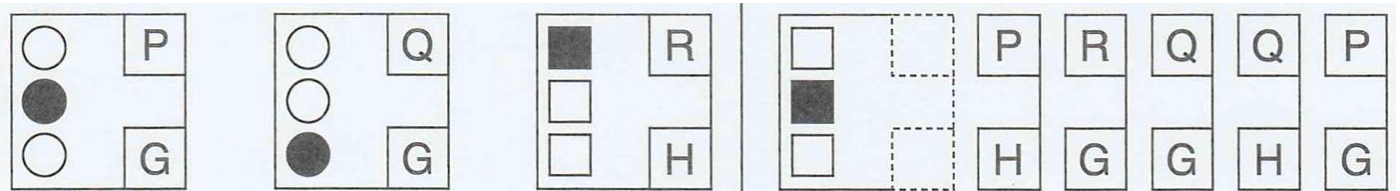
Section 1 – Work out the code

Example 1
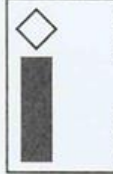
Example 2

Your turn…

Remember to work out what each letter represents (top and bottom row)
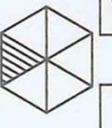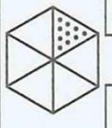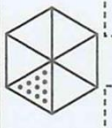
Question 1

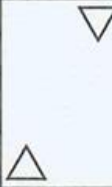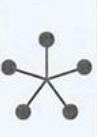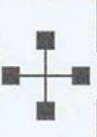### Question 2

Question 3

Question 1

Question 4

Question 5

Question 6

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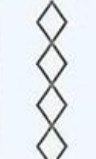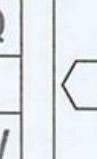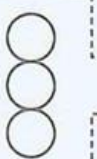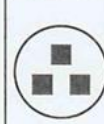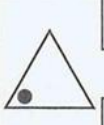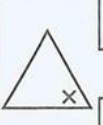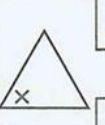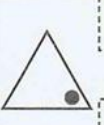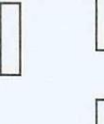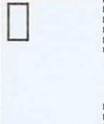
Question 7

Question 8

Question 9

Section 2 – Complete the sequence

Example 1
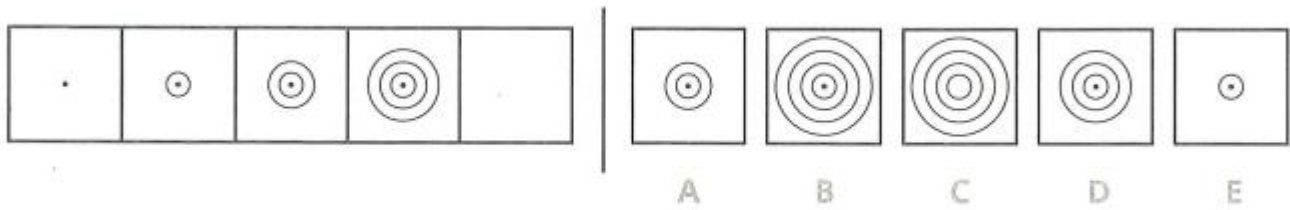
- The sequence on the left will always have a blank space (it might not be at the end) that can be filled in with one of the answers on the right

- It will follow a pattern that you need to work out

- In this example, the number of circles are increasing each time

- The fourth box has 4 circles meaning the last box has to have 5 so the answer is B

Example 2
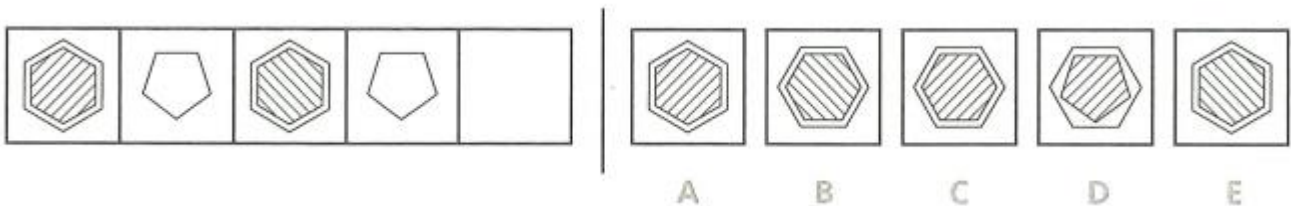
Example 3
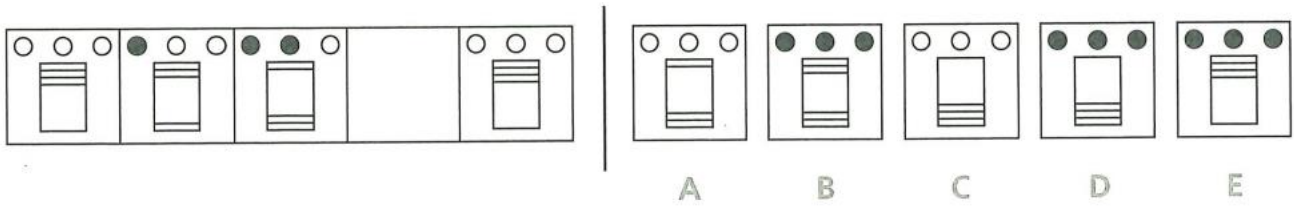
Top tips:

- First try and find the pattern
- Look to see if it could be alternating between two patterns
- Look to see if there is more than one thing happening in the pattern
- Look to see if you can rule out any answers that clearly don't fit
- If you have no idea what the answer have an educated guess!

Things that may be part of the pattern to look out for:

- Shading
- Different shapes (number of sides)
- Rotations (of shapes and lines)
- Reflections
- Number of lines or dots

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Your turn…

Question 1

Question 2

Question 3
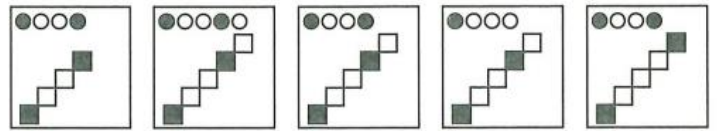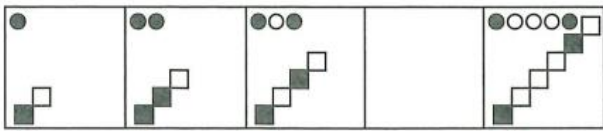
Question 4

A   B   C   D   E

Question 5
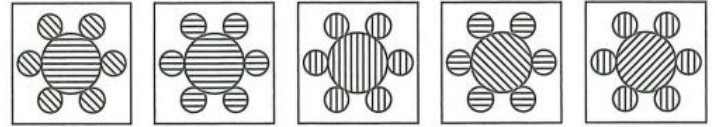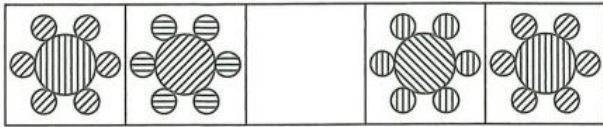
A   B   C   D   E

Question 6

A   B   C   D   E

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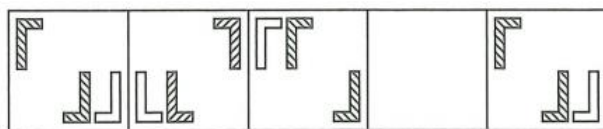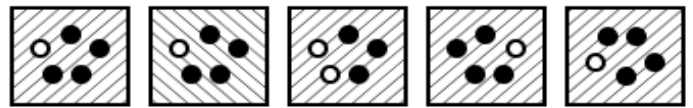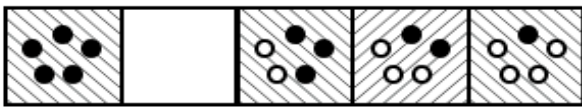
Question 7

Question 8

Question 9

Section 3 – Find the figure like the others

Starter 1
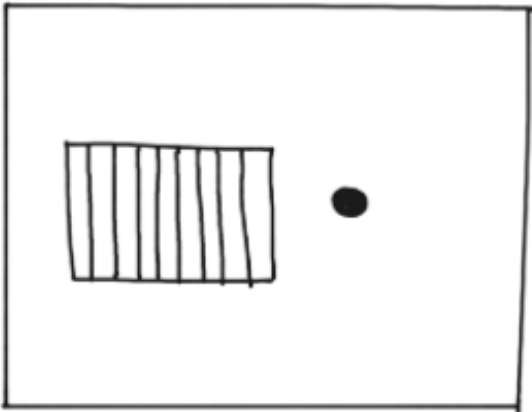
What do you notice?

Starter 2
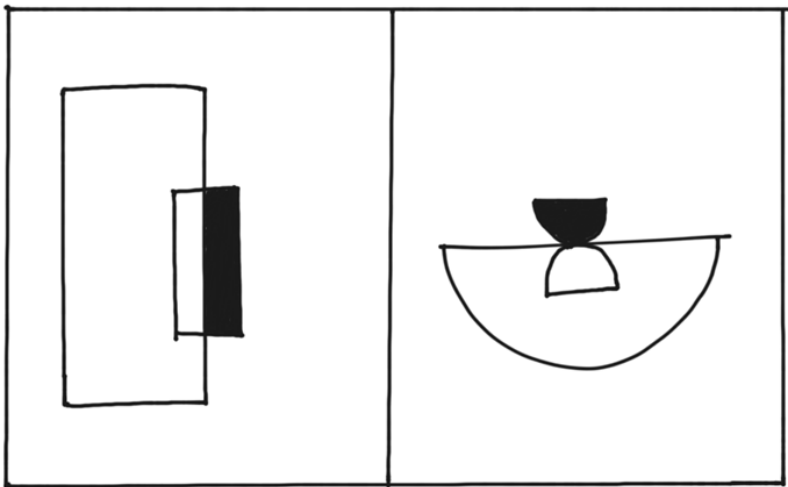
What are the similarities between the pictures?

What are the differences?
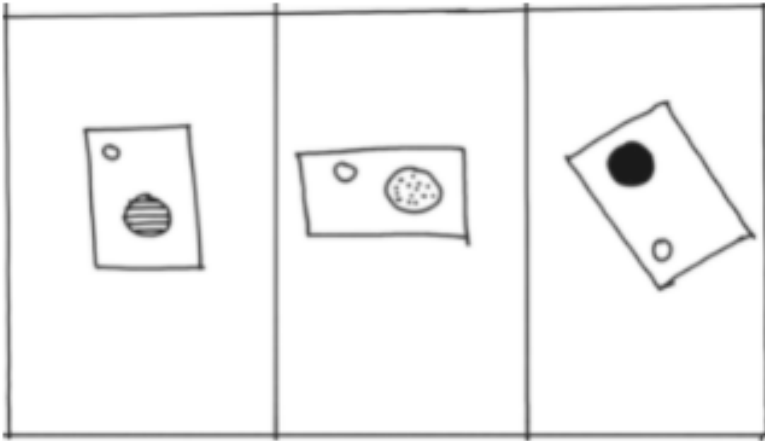
What are the similarities between the pictures?

What are the differences?

What this question is about

You are given 3 pictures on the left-hand side of a line, and 5 on the right hand side. You need to choose which of the 5 pictures on the right is **most like** the pictures on the left.

These questions can be difficult at first - the trick is to be systematic and look for specific features that all three of the pictures on the left have in common. Then choose the picture on the right which also shares this feature.

Practice is key with these questions. Check your answers and if you get a question wrong, try to work out why the correct answer is right.

Eventually, you will learn which kinds of features to look for. It can be tempting to just guess and go on instinct - this can be useful if you are running out of time, and it's always better to guess than to leave an answer blank - but hopefully with practice you will learn to approach these questions logically and systematically.

A quick note

"Non-verbal" means "without words" - meaning that it can sometimes be very hard to explain and discuss these types of questions using words!!

Here's a quick guide to the words we will be using:

- Figure/picture/shape: There's three of those on the left (the question part) and 5 on the right (labelled A to E)

- Characteristic: a "feature" that a figure has, for example, how a shape is shaded, where two shapes are relative to each other, how many sides a shape has, etc.

Characteristics to notice

Remember the acronym SNAPSS:

- S: shape
- N: number
- A: angle
- P: position
- S: size
- S: shading

A very reliable way to do this type of question (and the method which we will show you how to do in this session) is to go through the above list and make a note of anything that you notice. Most importantly, identify whether each characteristic is the same or different between the three shapes you are given.

Near the beginning of the paper, the questions will be easier, meaning that for some questions, you might know the answer after checking just two or three characteristics! However, later in the test, the questions will become more difficult, so you may need to make notes on ALL of the SNAPSS characteristics before you can decide on the answer. It can be helpful to go through the whole list properly even for the easier questions, while you are still learning and practising. This will help you remember the things to look out for and will prepare you for more difficult questions.

Below are some examples of questions to illustrate each of the key characteristics.

SHAPE
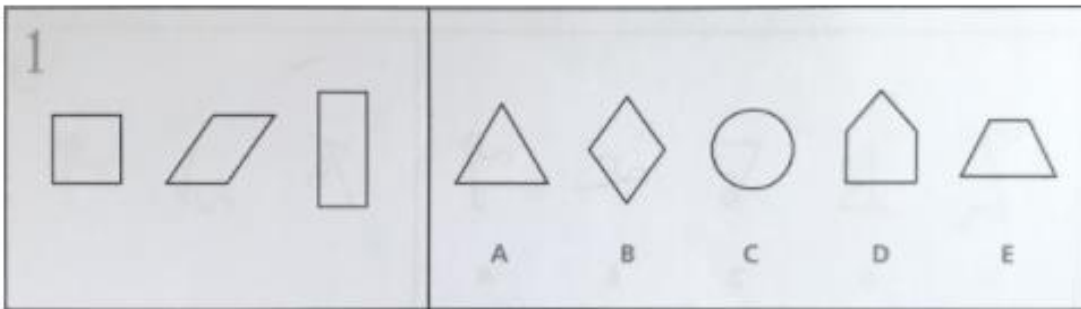
Notes:

Shape:

Number:

Angle:

Position:

Shading:

Size:

NUMBER

Notes:

Shape:

Number:

Angle:

Position:

Shading:

Size:

ANGLE

Notes:

Shape:

Number:

Angle:

Position:

Shading:

Size:

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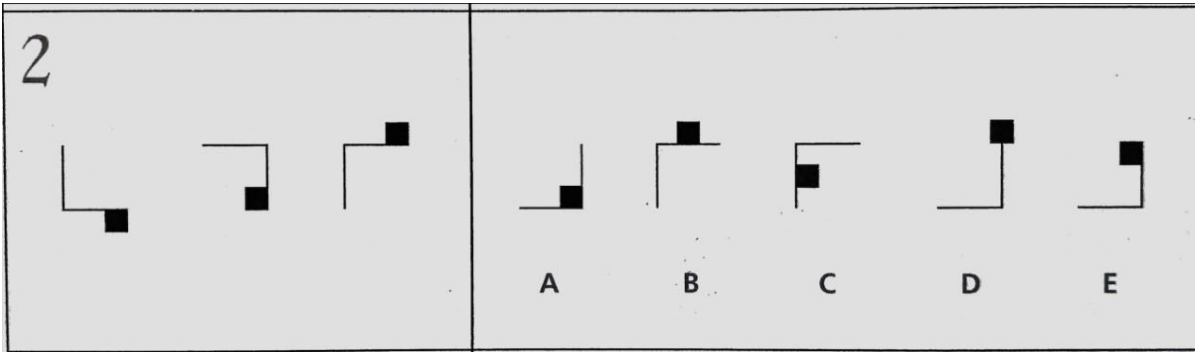
POSITION

Notes:

Shape:

Number:

Angle:

Position:

Shading:

Size:

SIZE
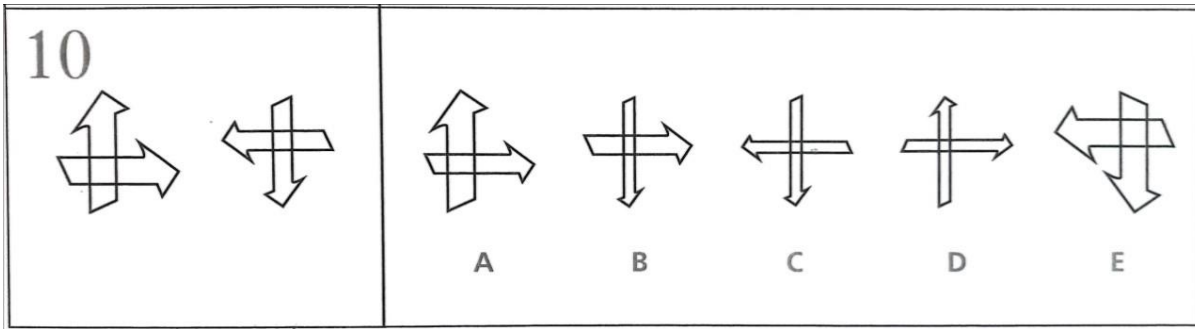
Notes:

Shape:

Number:

Angle:

Position:

Shading:

Size:

SHADING
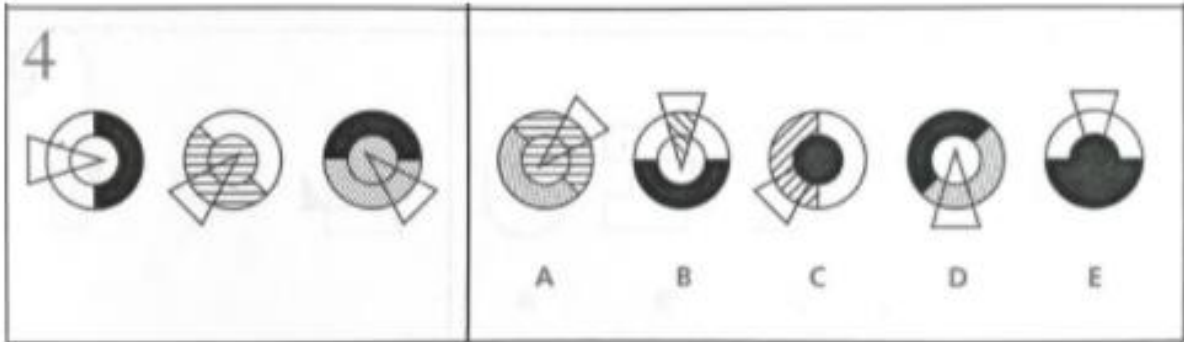
Notes:

Shape:

Number:

Angle:

Position:

Shading:

Size:

Example 1
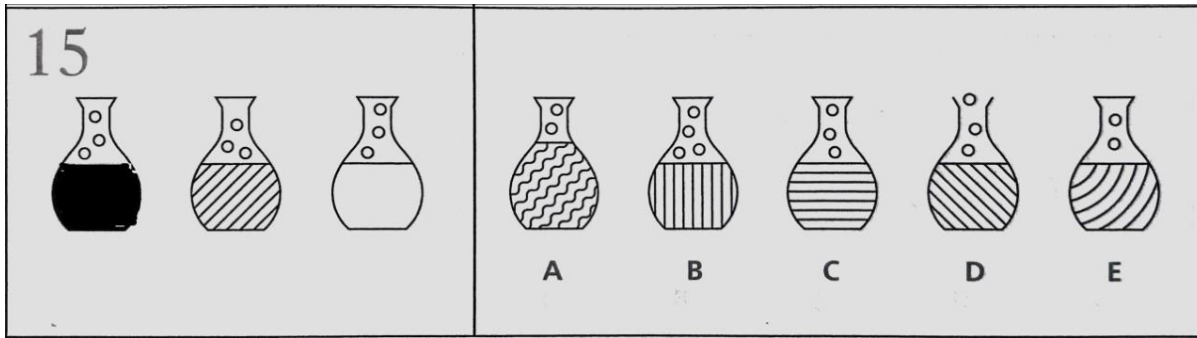
Notes:

Shape:

Number:

Angle:

Position:

Shading:

Size:

Example 2
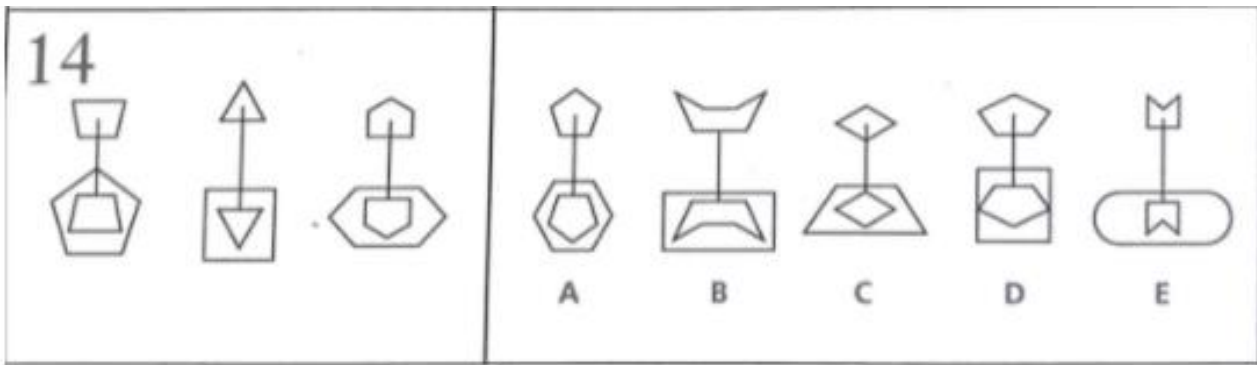
Notes:

Shape:

Number:

Angle:

Position:

Shading:

Size:

Advice for difficult questions

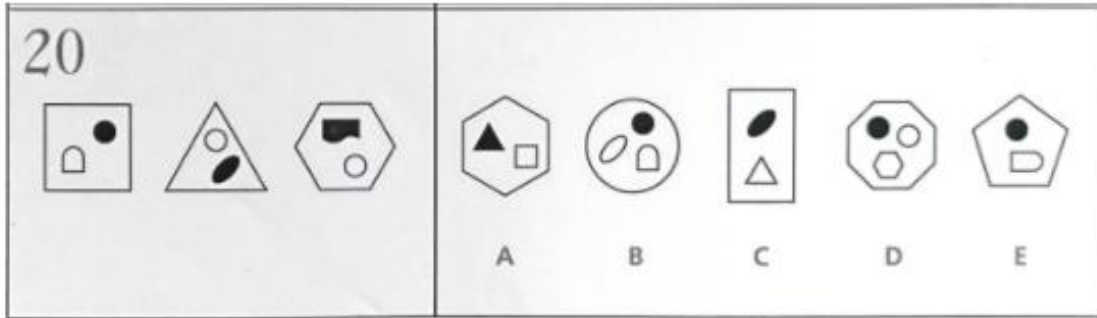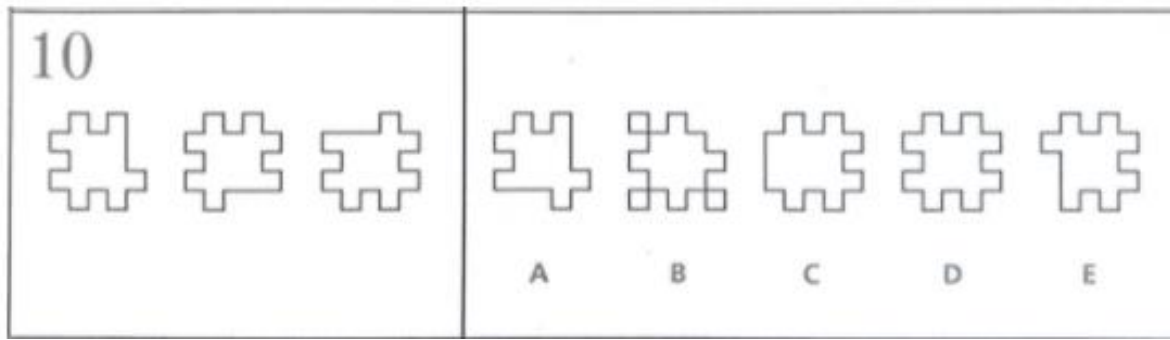Sometimes, the questions which come up can seem quite random and tricky! However, SNAPSS can always help. Each characteristic may not seem obvious at first, but if you keep calm and make a note of anything that you notice, your notes can lead to the answer, just as with the easier questions.

Example 3
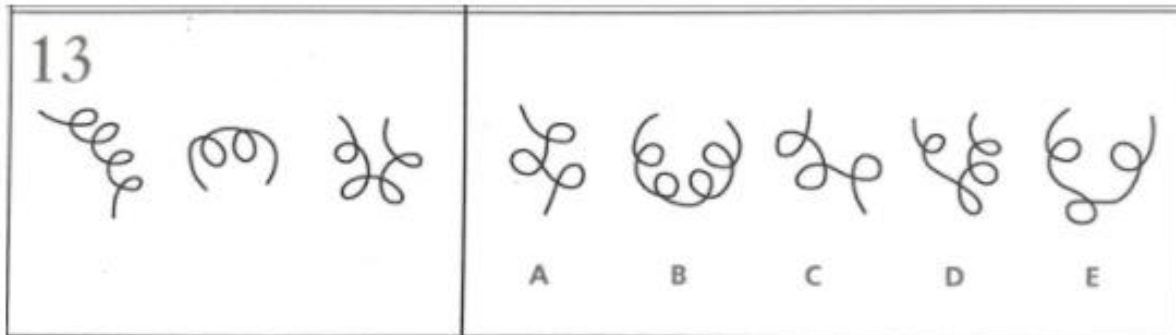
Notes:

Shape:

Number:

Angle:

Position:

Shading:

Size:

Make your own question!

Here is a space for you to have a think about the ideas you have learnt and try to design your own question in the style of the questions we have looked at today.

Section 4 – Letter codes

P1

⛉ XJ						
⛉ XK	⛉	XK	XJ	YK	XY	YJ
⛉ YJ		A	B	C	D	E

Top tips:

1. Determine which example has the same shape as the new shape.

2. Look out for more than one letter the same and figure out the similarity between.

3. Look out for shadings, shape, outline, direction and dots

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Question 1:

	YM	XN	ZM	YZ	ZN
	A	B	C	D	E

Question 2:

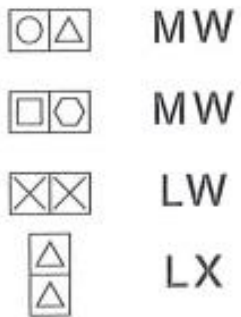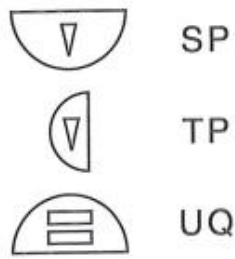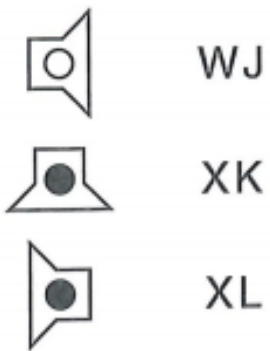|	MX	LW	MW	LX	WX
	A	B	C	D	E

Question 3:

Shape	Code
▽ (half circle with V)	SP
(quarter circle with V)	TP
(half circle with lines)	UQ

	SQ	TP	SP	UP	TQ
(half circle with V)	A	B	C	D	E

Question 4:

Shape	Code
(speaker with circle outline)	WJ
(speaker with filled circle)	XK
(speaker with filled circle)	XL

	WL	XJ	WK	XL	WJ
(speaker with circle outline)	A	B	C	D	E

Question 5:

Shape	Code
(shape with π and V)	XLR
(shape with μ)	YMS
(shape with π circle)	XNR
(shape with π)	XOS

	YNS	YMR	XMS	XNR	XMR
(shape with π)	A	B	C	D	E

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Section 5 – Transforming shapes

Top tips:

1) See what changes between the first 2 shapes

2) Try and eliminate obvious wrong answers

3) Try drawing out the shape you expect to see to help

4) Don't overthink the question, if you're not sure move onto the next question and come back when you have time later

Example 1:

Here, the triangle changes to a rectangle

If you do the same for this triangle you should get a dotted rectangle which is E
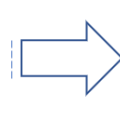
A   B   C   D   E

Example 2:

Here there is a horizontal flip, and the dots change to a solid line

If this shape is flipped horizontally, the arrowhead doesn't change but the line goes from dotted to straight
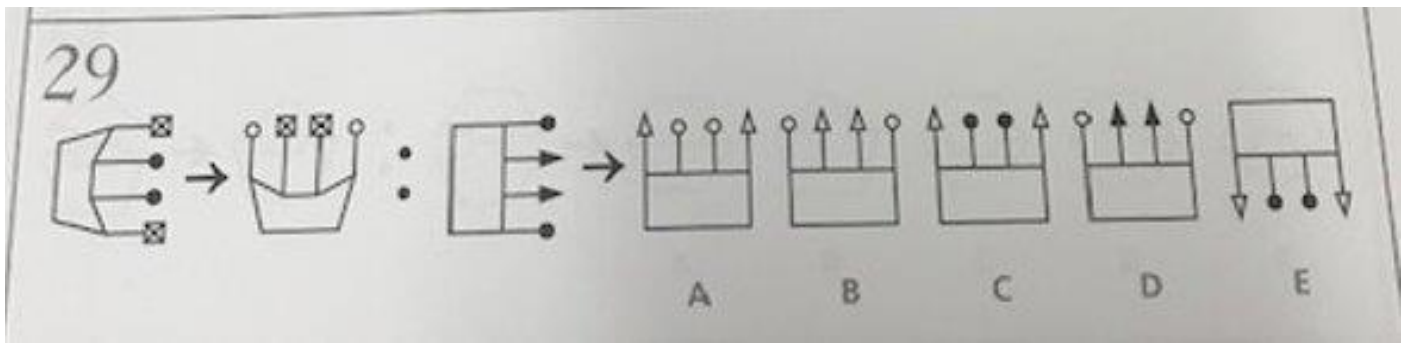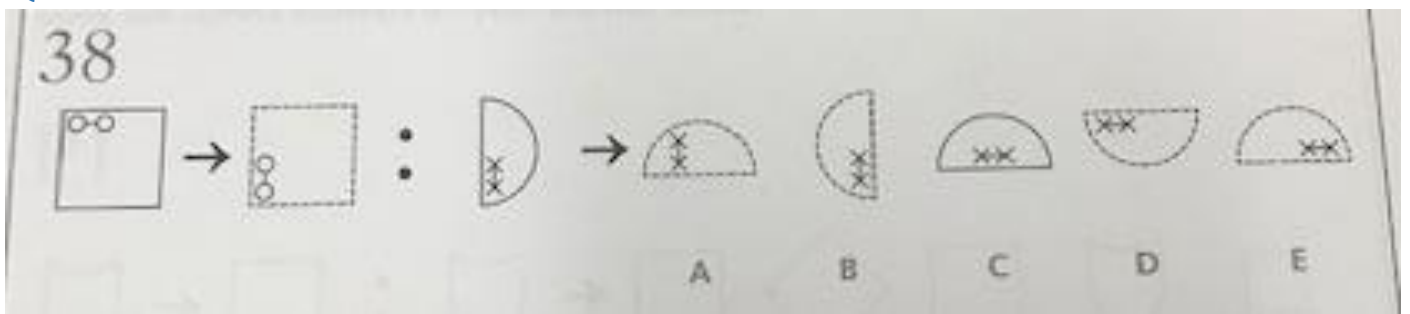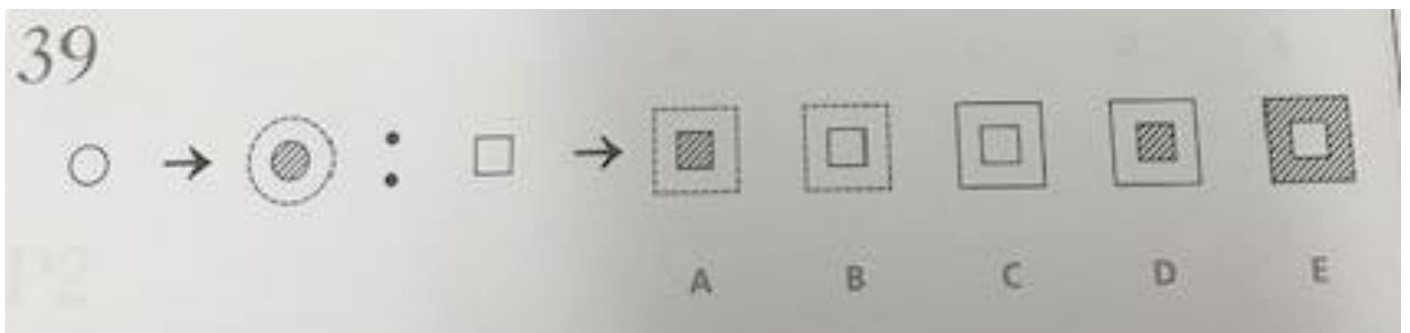
A   B   C   D   E
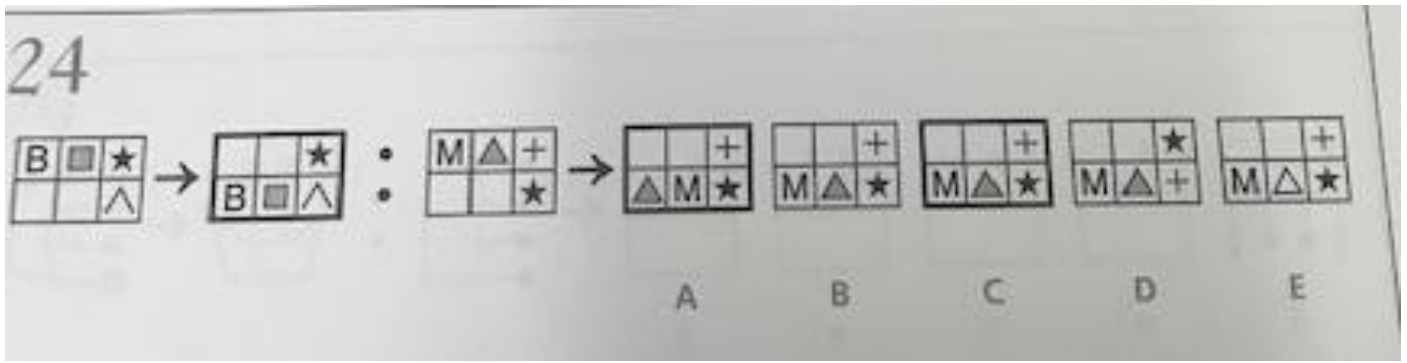
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Question 1:

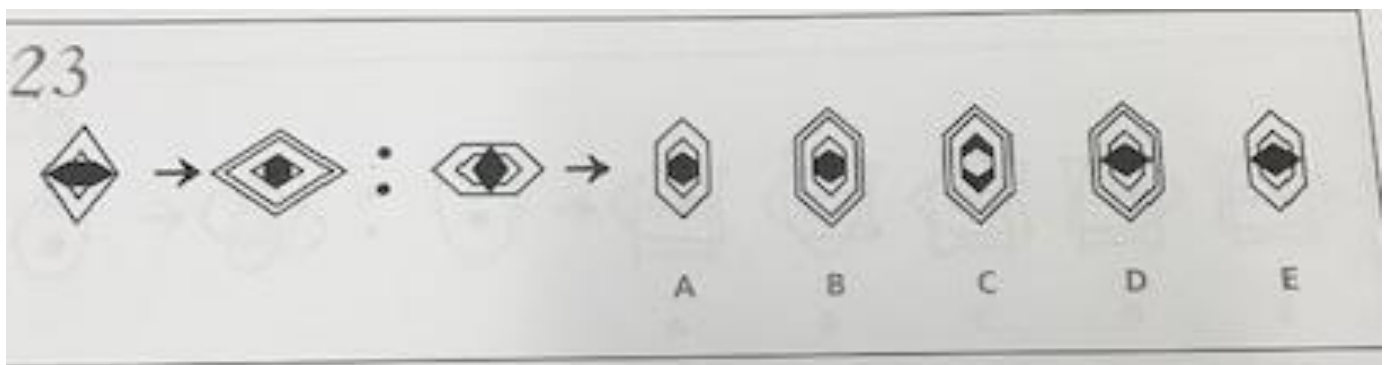# Question 2:

Question 3:

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Question 4:

Question 5:

Question 6:

Section 6 – Most unlike

In this style of question, you are trying to spot the odd one out from the pattern:

1. Find the pattern in the sequence

2. Follow the pattern and find the shape that doesn't fit

3. This will be the answer!

Top tip:
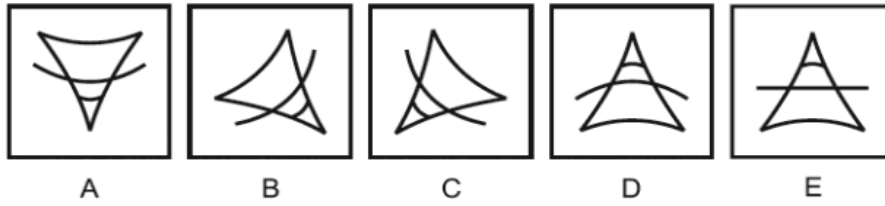
S-shape
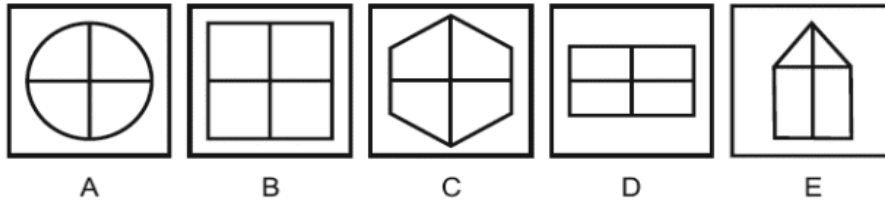# C-colour(shading)
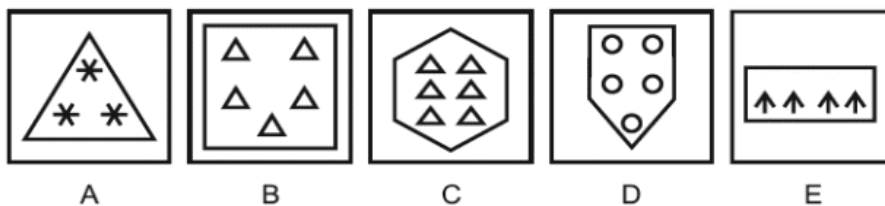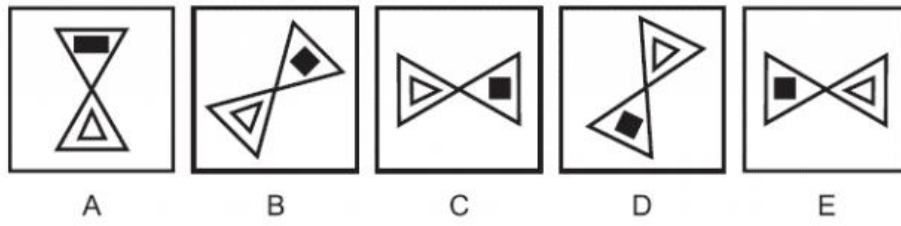# A-arrangement
N-number
S-size/symmetry

Question 1

A   B   C   D   E

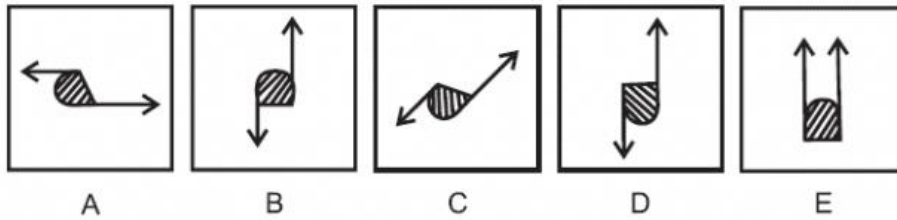## Question 2

A   B   C   D   E

Question 3

A   B   C   D   E
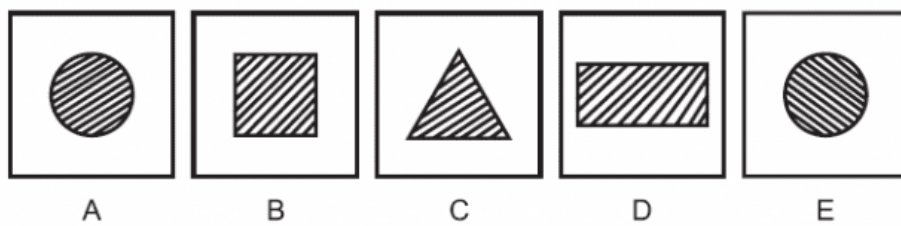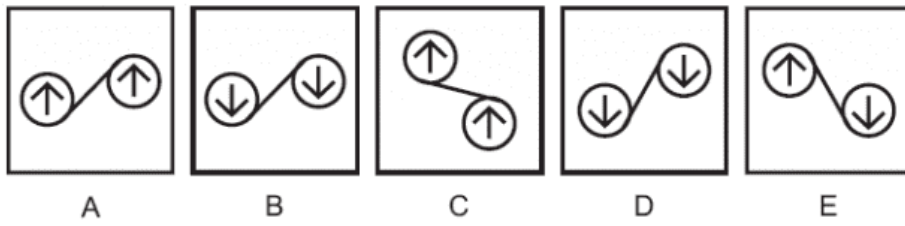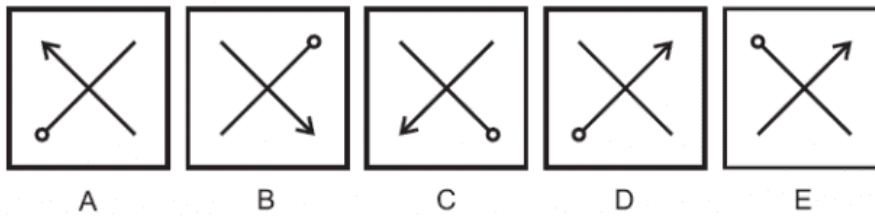
Question 4

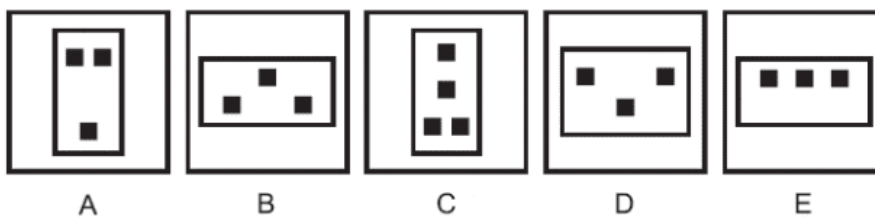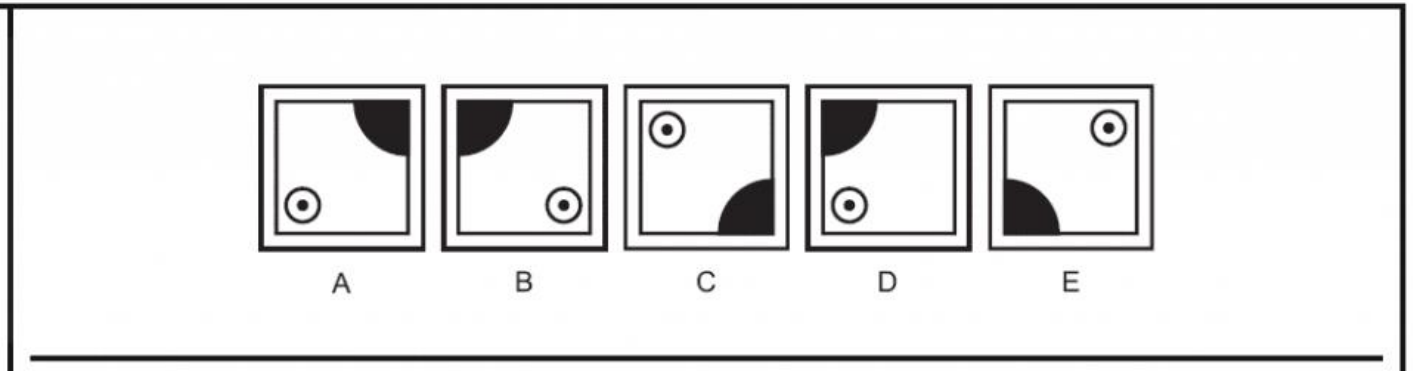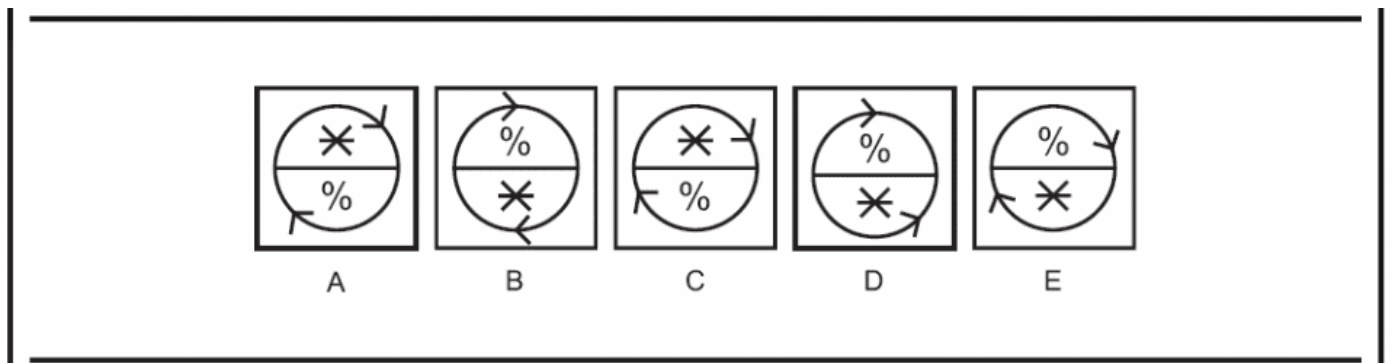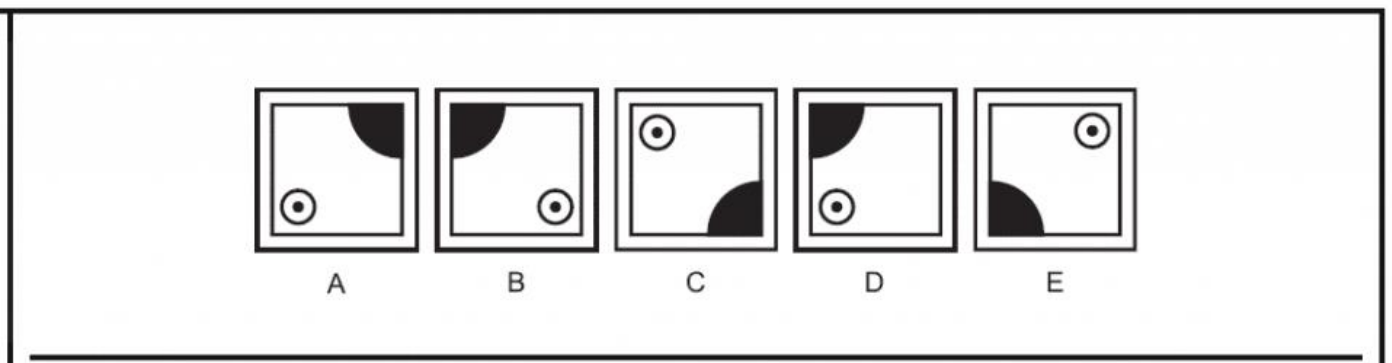## Question 5

Question 6

Question 7

Question 8

Question 9

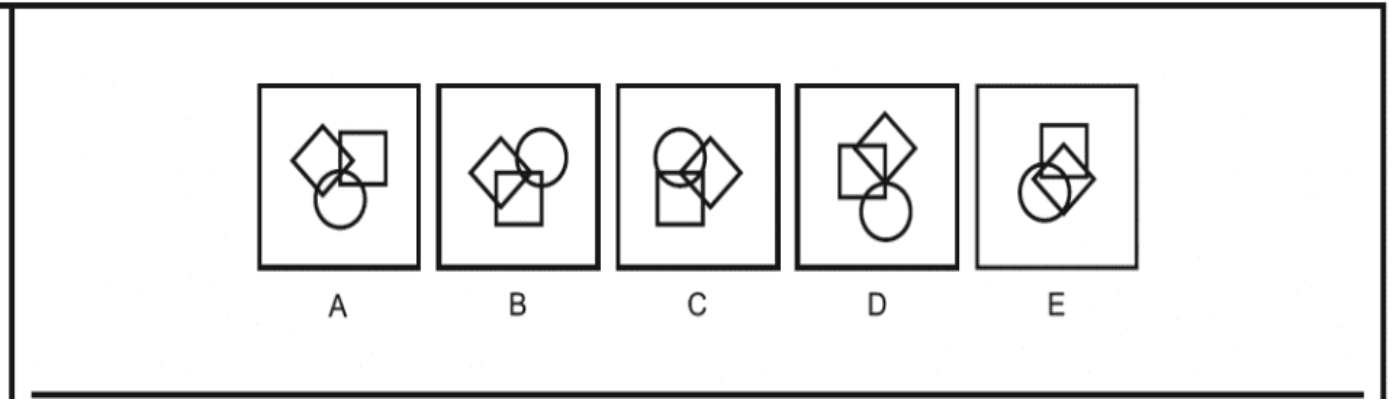West Kirby
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Question 10

Question 11

Question 12

Question 13

A   B   C   D   E

Question 14

A   B   C   D   E

Question 15

A   B   C   D   E

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