www.mathleague.world

2025-2026 Math League Preliminary Round

(Grade 2)

(Unofficial version, for reference only)

The following description applies to the following 10 questions.

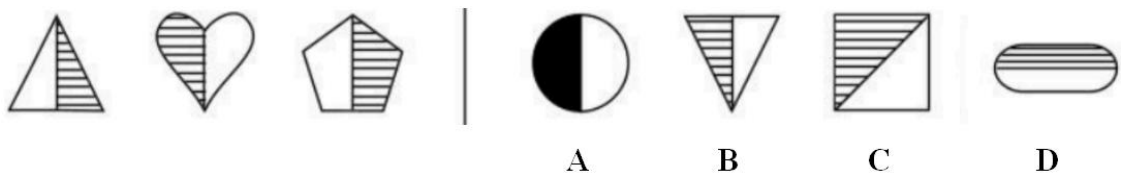
Look at the first three figures. They go together in some way. Choose one more figure in the rest of the row that goes with the first three figures in the same way. For example, the first three figures are the same figure rotated. So, the correct answer is B.



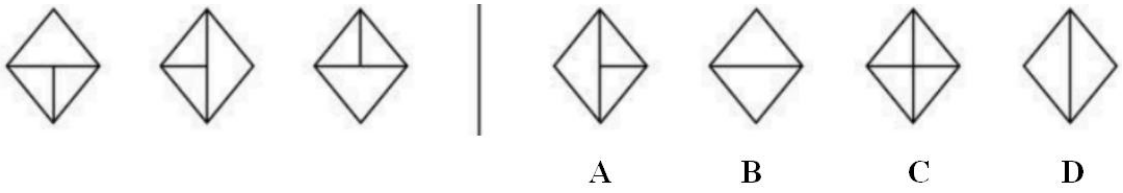
Question 1:



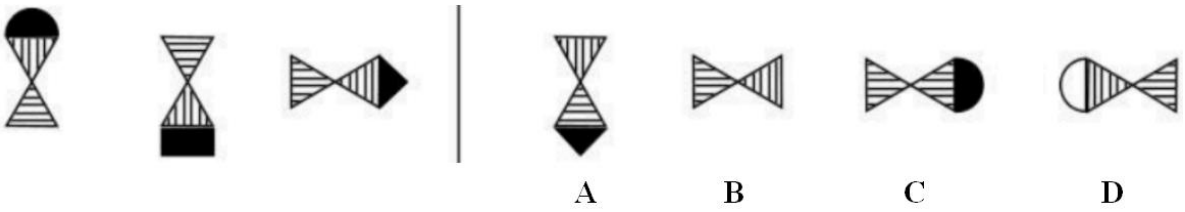
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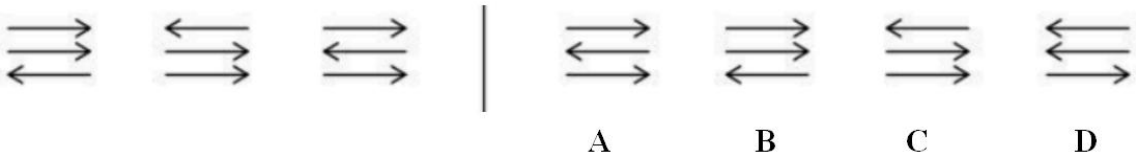
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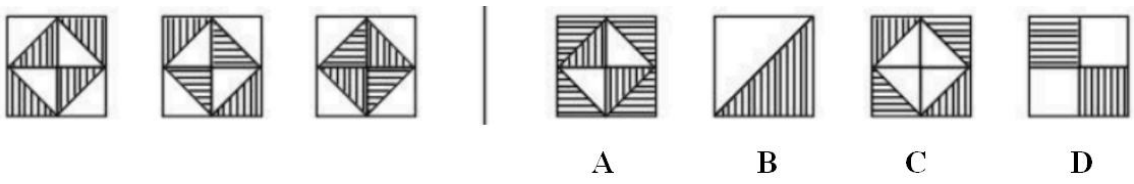
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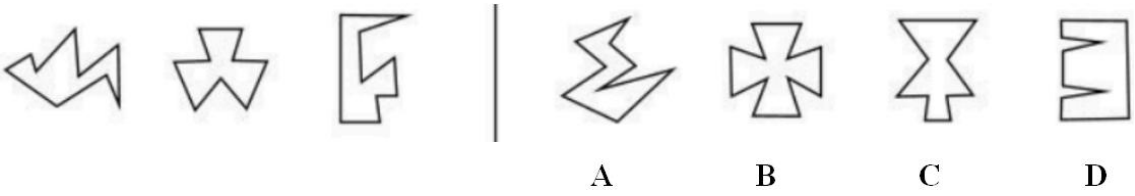
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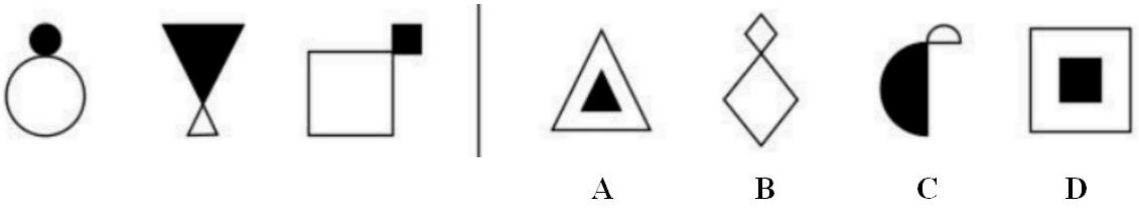
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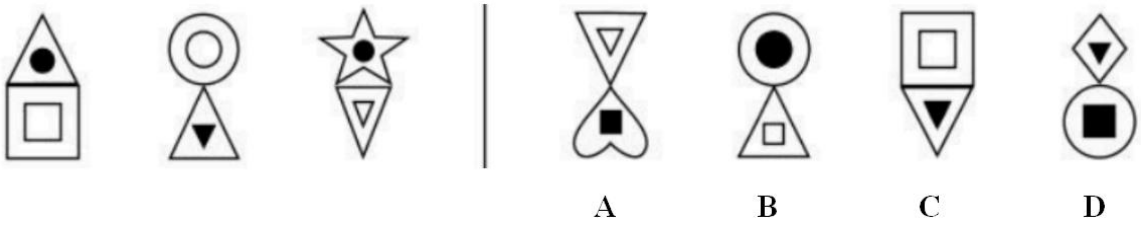
Question 7:



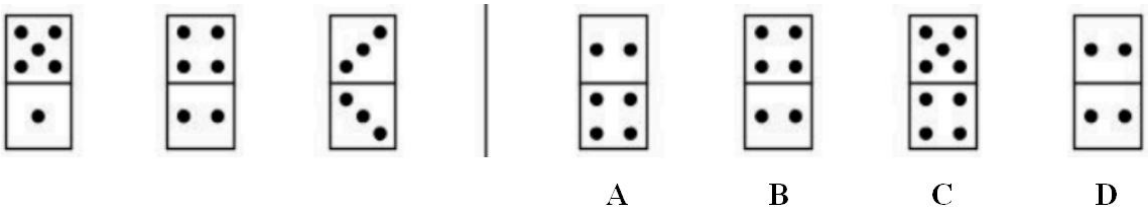
Question 8:



Question 9:



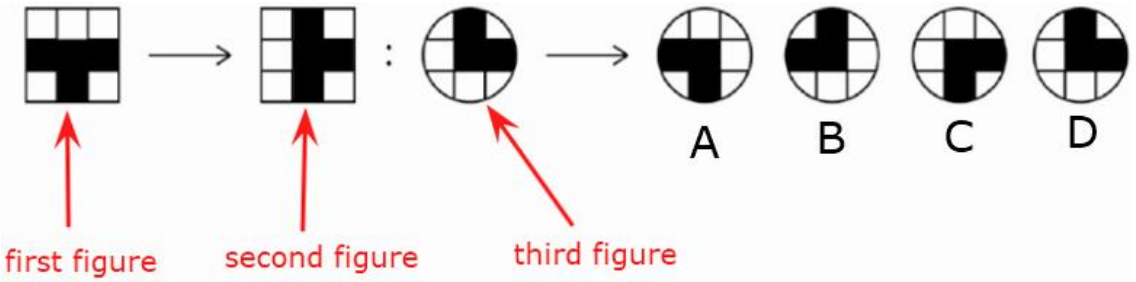
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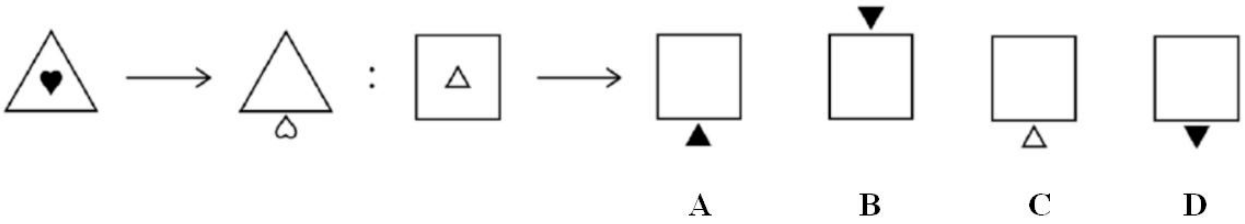
The following description applies to the following 10 questions.

The first two figures go together in a certain way. Look at the third figure. It goes with one of the answers the same way the first two figures go together. Choose the answer that goes with the third figure the same way the first two figures go together.

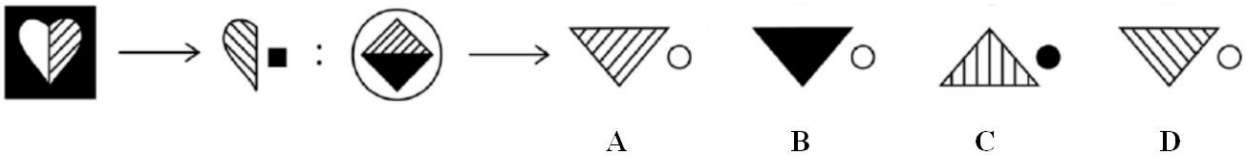
In the following example, the **second figure,** **,** is created by rotating the first figure 90° counter-clockwise. Therefore, the correct answer is **B:** rotating the third figure 90° counter-clockwise.



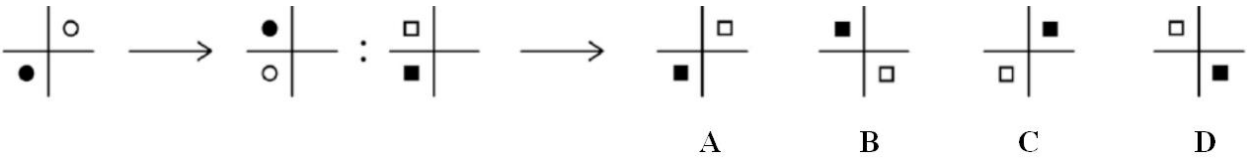
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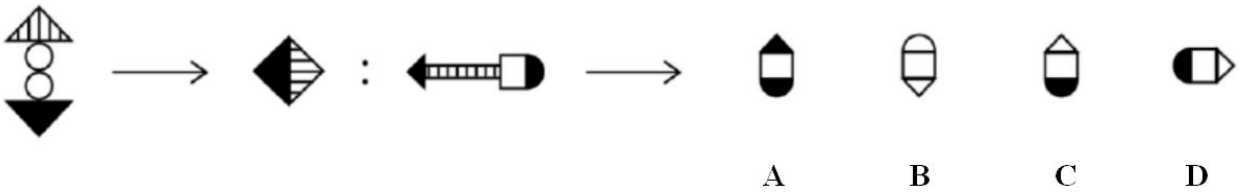
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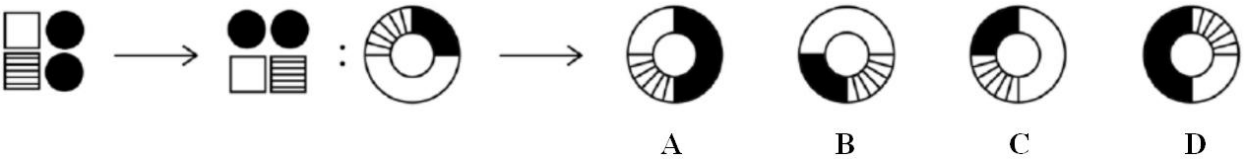
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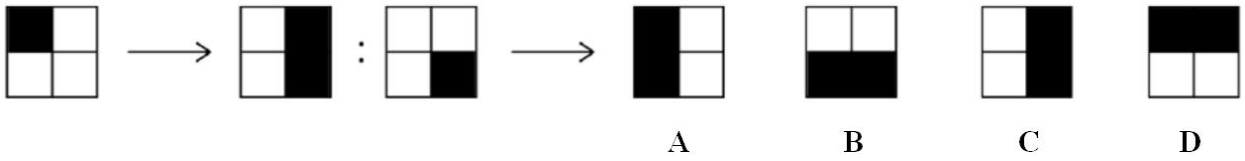
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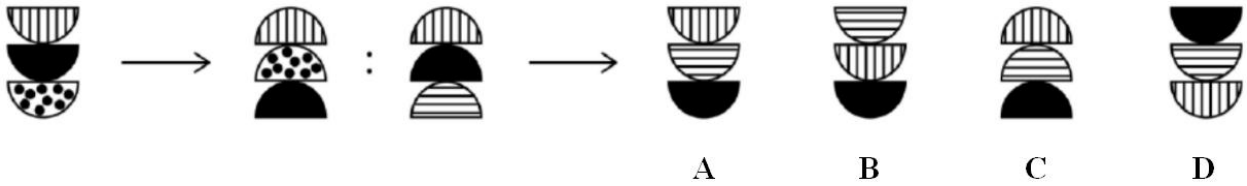
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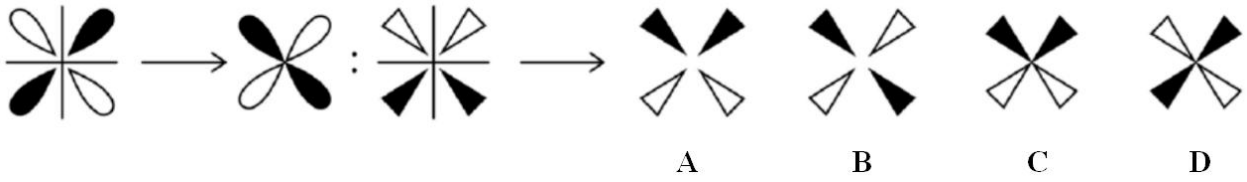
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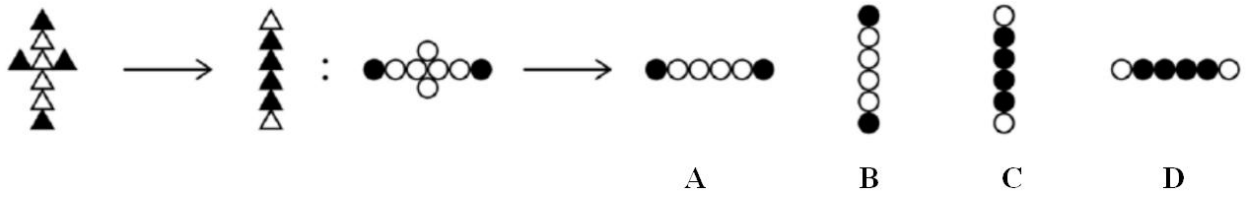
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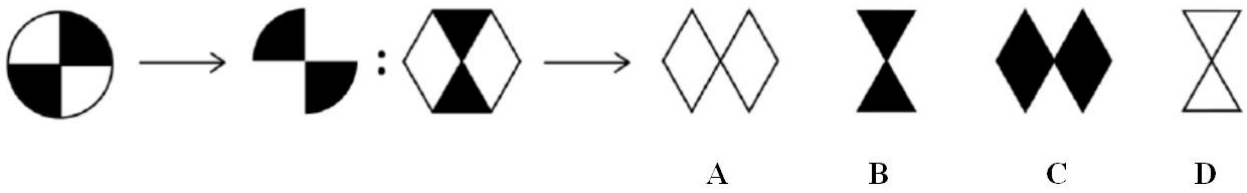
Question 18:



Question 19:



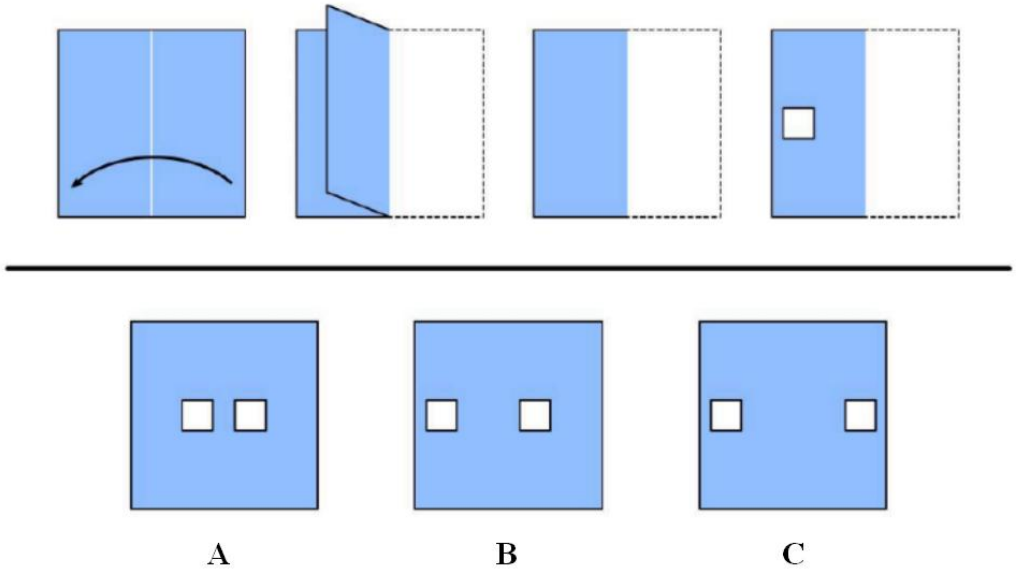
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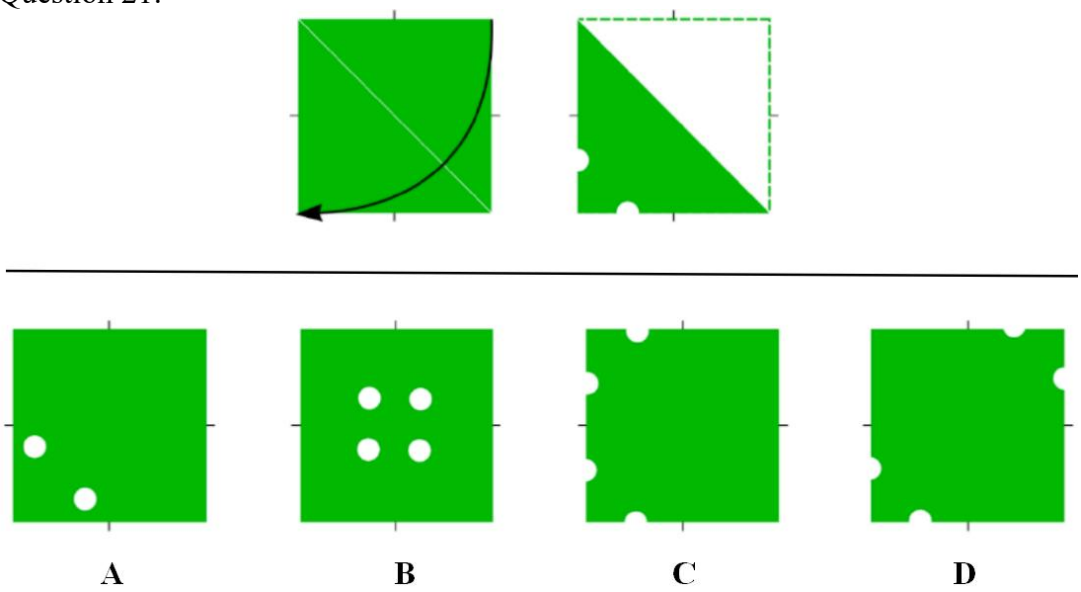
The following description applies to the following 10 questions.

Take a look at the pictures across the top row. They show a piece of square paper being folded. Then, one or more holes are punched in the folded piece of paper. Can you point to the answer that shows what the square piece of paper will look like when it is unfolded?

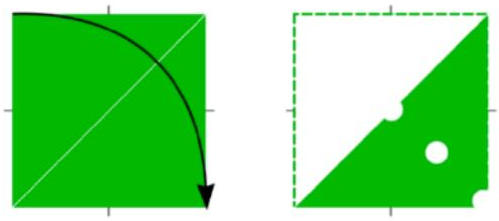
For example, in the figure below, the answer is C.

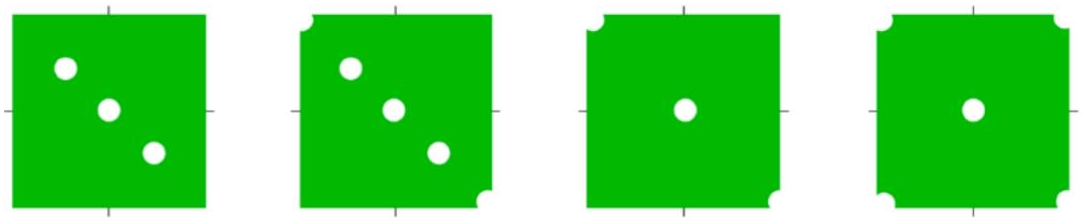


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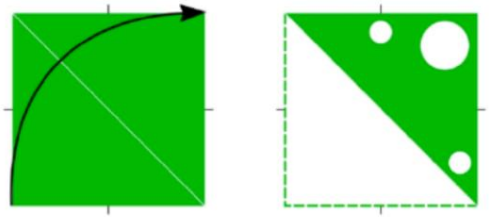
Question 22:

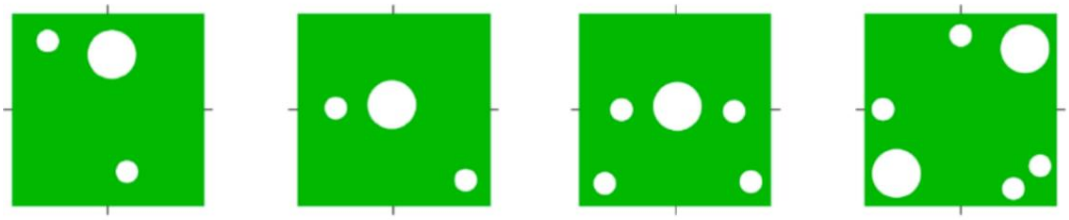




A B C D

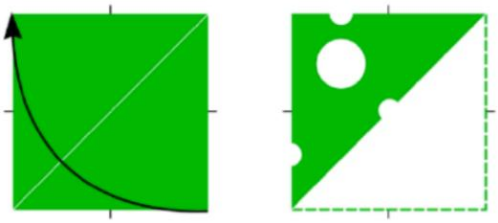
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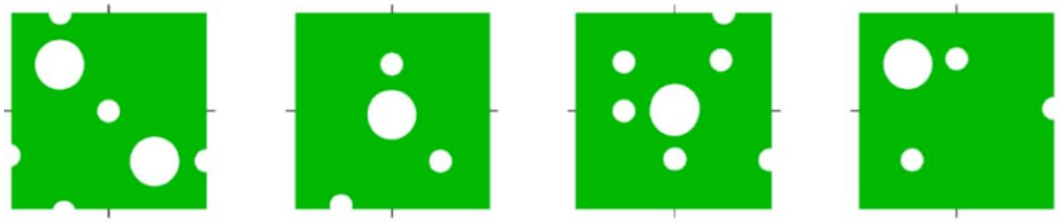




A B C D

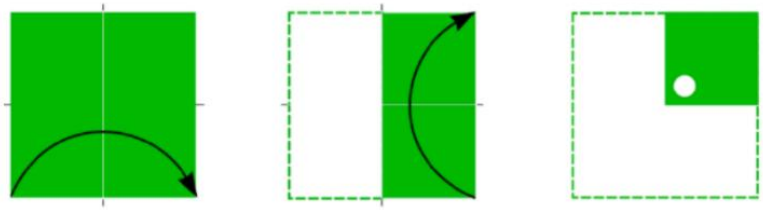
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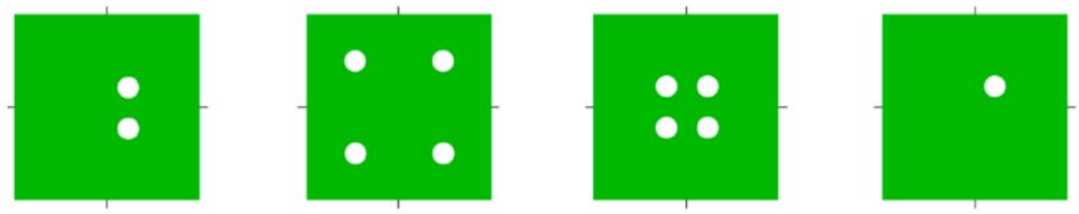




A B C D

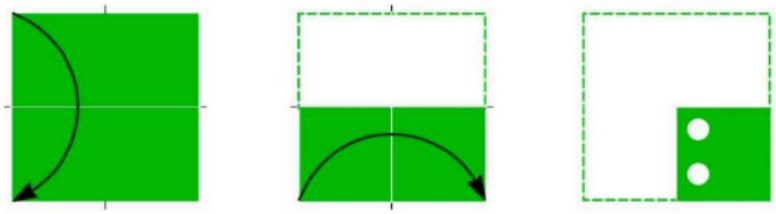
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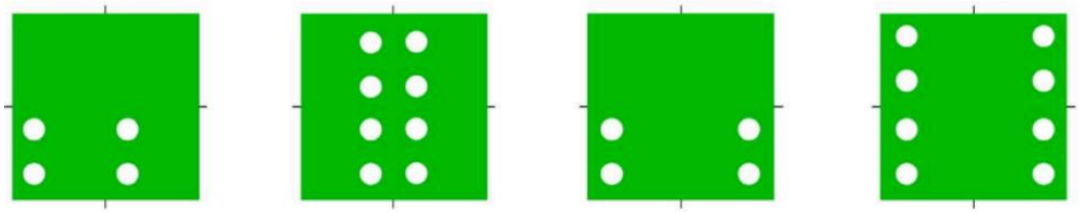




A B C D

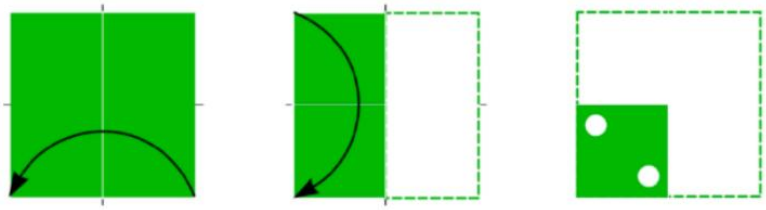
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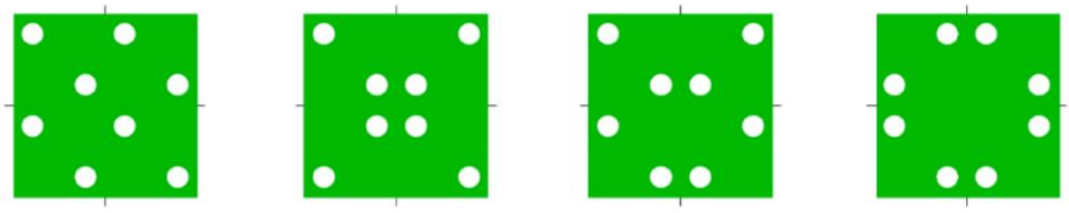




A B C D

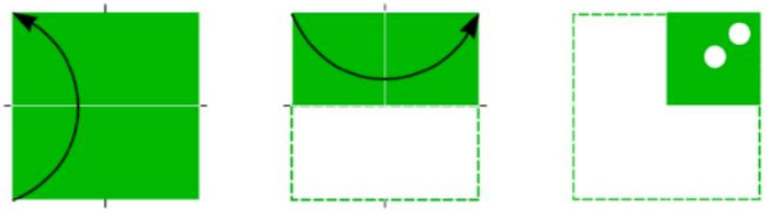
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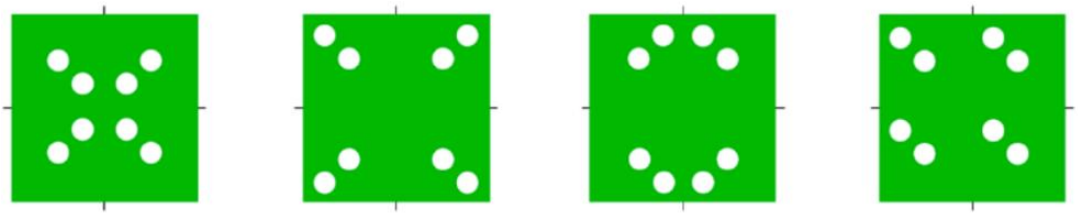




A B C D

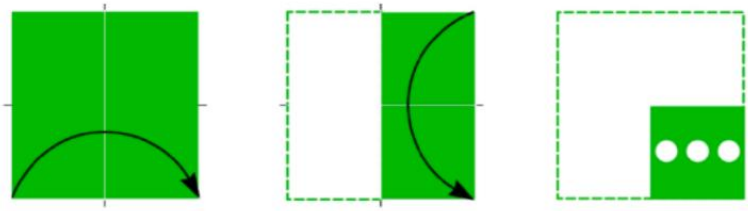
Question 28:

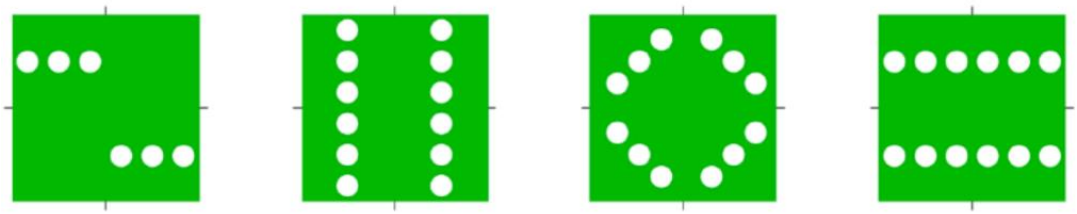




A B C D

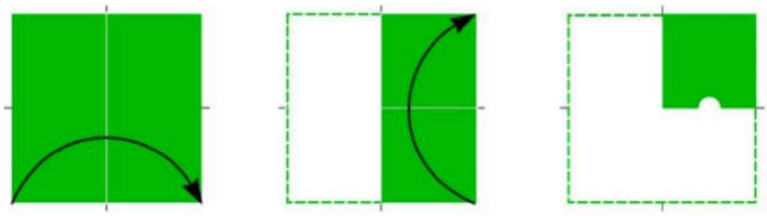
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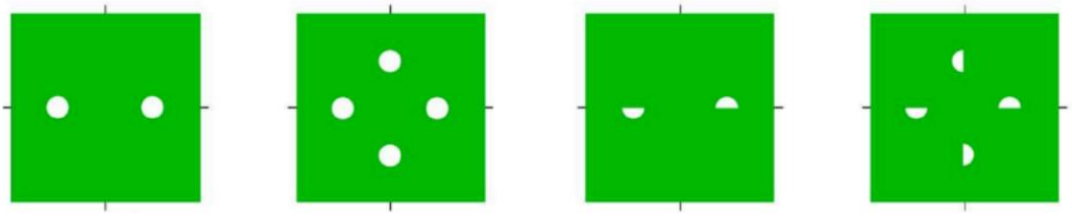




A B C D

Question 30:





A B C D

Question 31:

$7 \times 13 \times 17 \times \underline{?} = 21 \times 26 \times 34$

A) 10 B) 12 C) 14 D) answer not shown

Question 32:

$21 \times 58 \div 29 = 6 \times \underline{?}$

A) 8 B) 9 C) 10 D) answer not shown

Question 33:

$88 + 321 - 121 = 77 + 545 - 345 + \underline{?}$

A) 9 B) 11 C) 13 D) answer not shown

Question 34:

A rectangular garden's length is three times its width. If the perimeter is 296 meters, what is the width?

A) 74 m B) 49 m

C) 36 m D) answer not shown

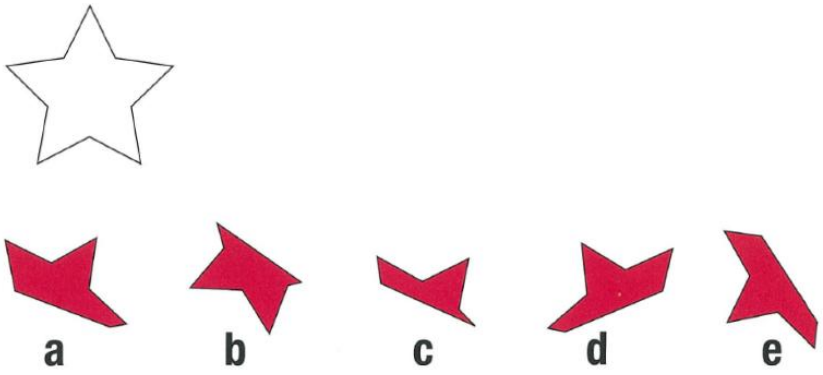
Question 35:

Tom has four cards labeled 1, 2, 3, and 4. How many different two-digit numbers can he form by using two distinct cards at a time?

A) 6 B) 9 C) 12 D) answer not shown

Question 36:

Which two pieces will fit together perfectly to form a red copy of this white star? Pieces may be rotated, but not flipped over. (Note: The pictures were not necessarily drawn to scale.)



A) One of them is a.

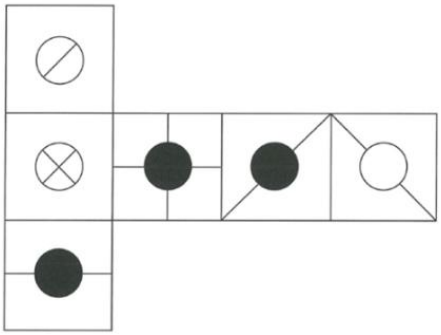
B) One of them is b.

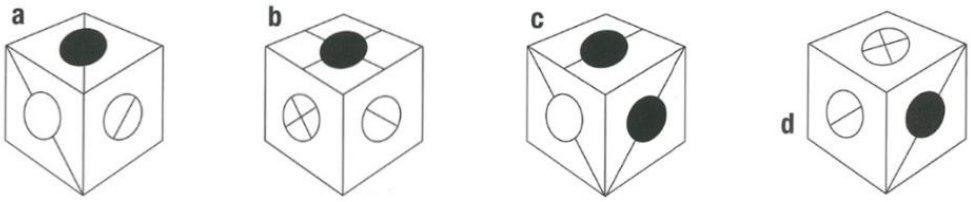
C) One of them is c.

D) Answer not shown

Question 37:

When the shape below is folded into a cube, which one of the following (a, b, c, or d) is produced?





A) Cube a

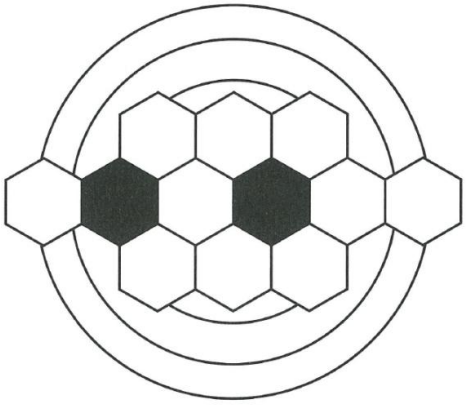
B) Cube b

C) Cube c

D) Cube d

Question 38:

In the figure below, two regions have already been painted black. Now, we need to paint all the regions without using black again, and adjacent regions must be painted with different colors. At least how many more colors are needed (excluding black)?



A) 2

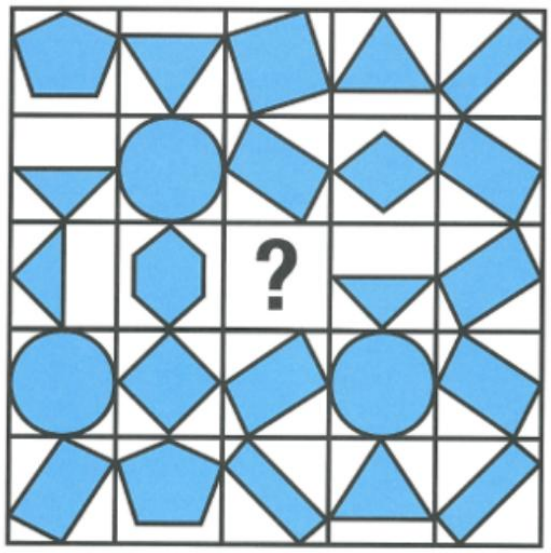
B) 3

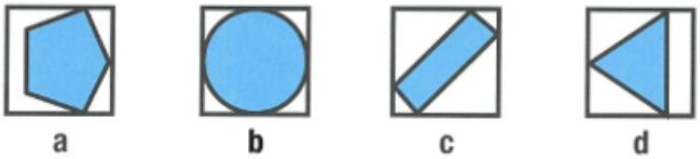
C) 4

D) 5

Question 39:

What shape is missing?

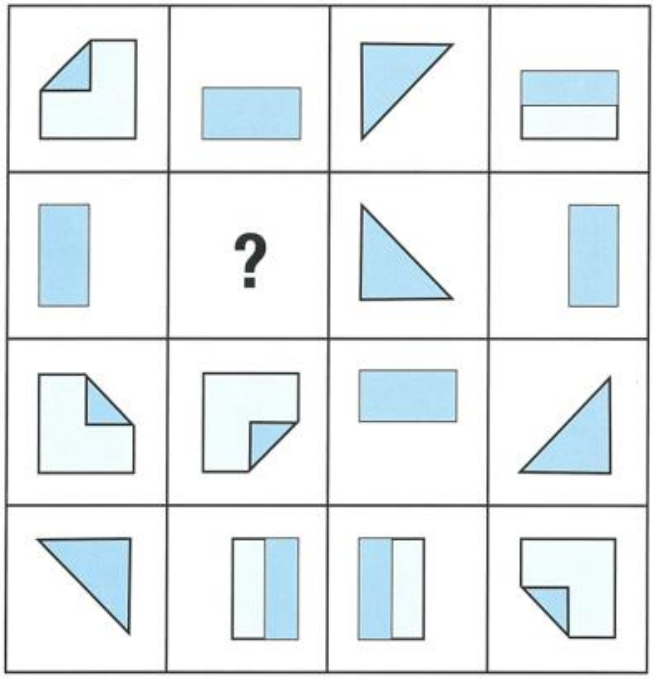


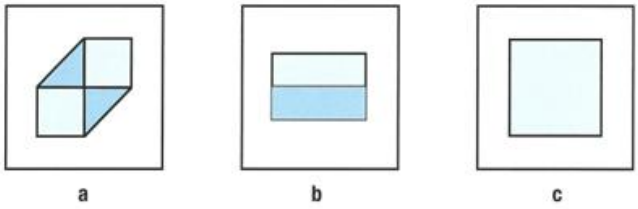


A) a B) b C) c D) d

Question 40:

Which of the figures below (a, b, or c) completes the grid?

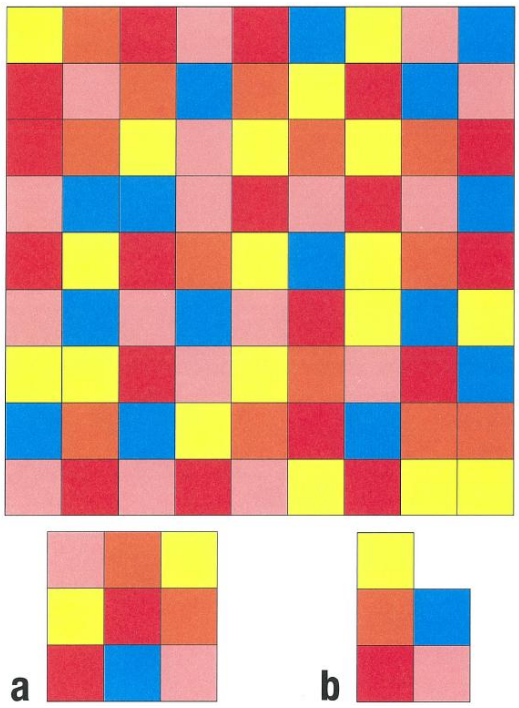




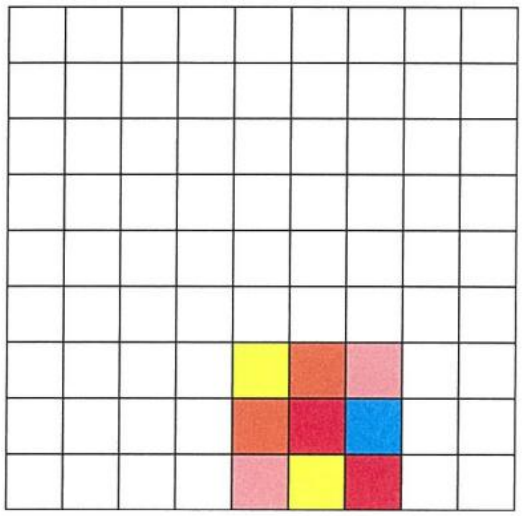
A) a B) b C) c

Question 41:

Patterns a and b can be found in the grid. The patterns may be rotated but not reflected.



For example, there is only one occurrence of Pattern a in the grid, as shown below.



How many occurrences of Pattern b are in the grid?

A) less than or equal to 4

B) 5

C) 6

D) greater than 6

Question 42:

A circular loop of string lies flat on a table without crossing. Part of the string has been hidden from view by the black border. If X is inside the loop, what can you say about Y?



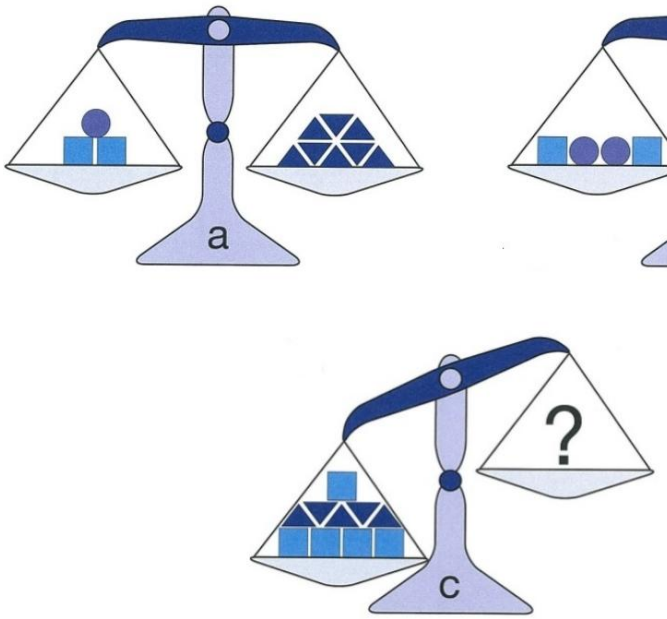
A) Y is outside the loop.

B) Y is inside the loop.

C) Both of the above scenarios are possible.

Question 43:

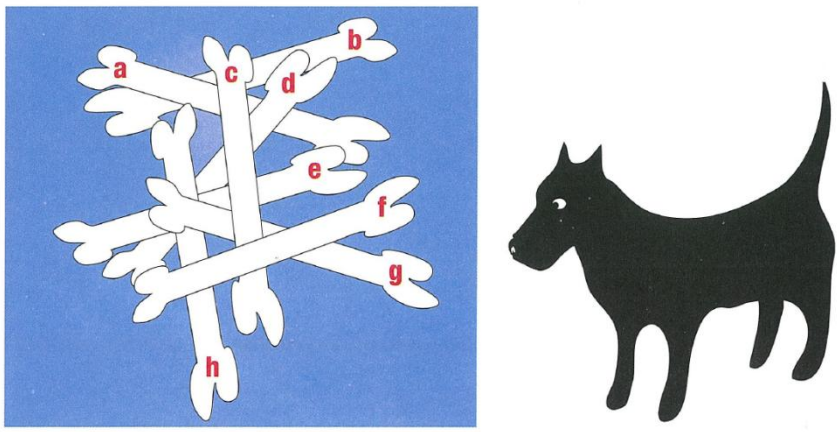
Given that scales a and b balance perfectly, how many circles are needed to balance scale c?



A) 7 B) 8 C) 9 D) answer not shown

Question 44:

The dog has laid his bones out for your inspection. It is clear that bone f is on top. We say that bone f is the 1st bone when counting from the top. Which one is the 5th bone from the top?

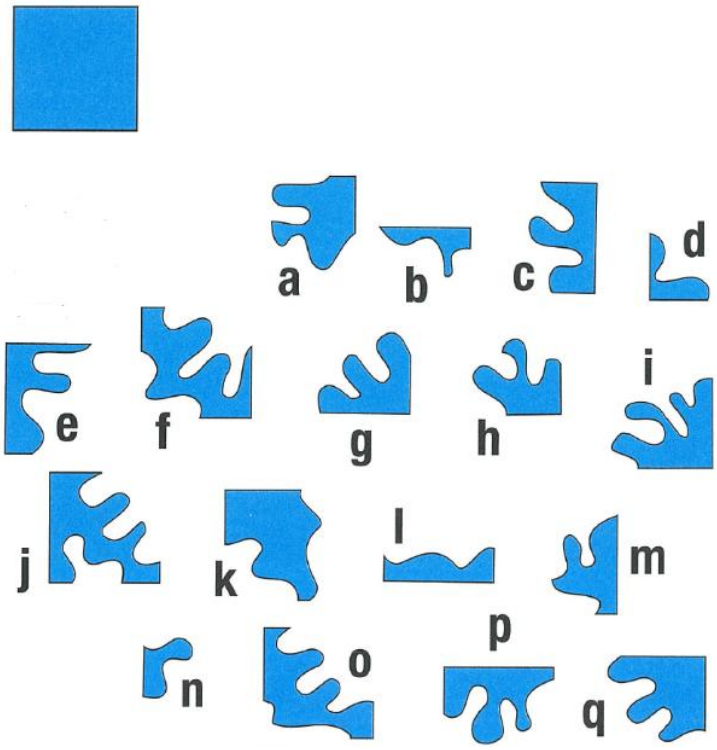


A) bone a B) bone d

C) bone e D) Answer not shown

Question 45:

Which three pieces can be fitted together to form an identical copy of this square? Pieces may be rotated, but not flipped over. (Note: The pictures were not necessarily drawn to scale.)



A) Two of them are e and q.

B) Two of them are g and n.

C) Two of them are i and o.

D) Answer not shown.

Answers										
Question	1	2	3	4	5	6	7	8	9	10
Answers	**D**	**B**	**A**	**A**	**B**	**C**	**A**	**C**	**A**	**A**
Question	11	12	13	14	15	16	17	18	19	20
Answers	**D**	**D**	**C**	**A**	**C**	**A**	**A**	**C**	**D**	**C**
Question	21	22	23	24	25	26	27	28	29	30
Answers	**D**	**B**	**D**	**A**	**C**	**B**	**D**	**B**	**D**	**A**
Question	31	32	33	34	35	36	37	38	39	40
Answers	**B**	**D**	**B**	**D**	**C**	**B**	**C**	**B**	**A**	**B**
Question	41	42	43	44	45					
Answers	**C**	**A**	**D**	**C**	**B**					