NON VERBAL REASONING

11+

Practice Exercises

Ages
10-11

For the CEM(Durham University) Test

BOOK 2

Practice Exercises
For 11+
with
New Techniques

M.Nat

Practice Makes Perfect

Success at your fingertips

Published by **LEC Education**

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M.Nat

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With thanks to the moderators of Luxmi Education Centre 11+ Division.

First edition	2014	Second edition	2015	Third edition	2016
Fourth Edition	2018	Fifth Edition	2019		

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Published by LEC Education 101A Blyth Road, Hayes, UB3 1DB

www.leconline.co.uk

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Designed by LEC direct, R. Nat , Hayes

NON VERBAL REASONING

WITH CEM STYLE QUESTIONS

Practice questions

M.Nat

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This book is designed to cover the question types set by the CEM. We cannot guarantee that your child will face the same type of questions in their actual 11+ examinations. Nonetheless, the sections in this book are intended to cover the different skills that are tested in these examinations. Parents must be aware that the 11+ examinations now consist of four core subject areas: Verbal Reasoning, English, Non Verbal Reasoning and Maths. Our experienced teachers are working hard to produce more books that will assist students with their preparation for this test.

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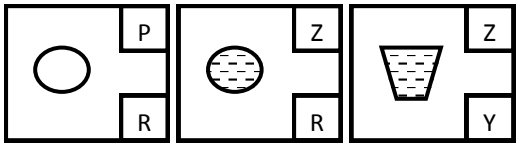
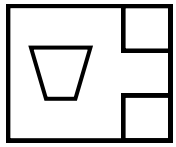
CODES

Select the code which matches the shape given.

EXAMPLE





P	Z	Z	P	Y
Y	Y	R	R	R

(a) b c d e

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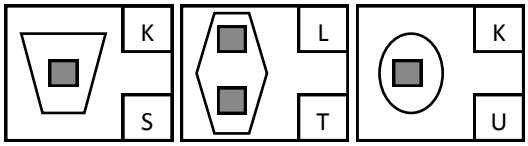

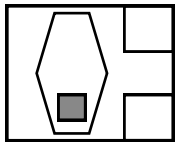

K	L	K	L	L
T	U	S	S	T

a b c d e

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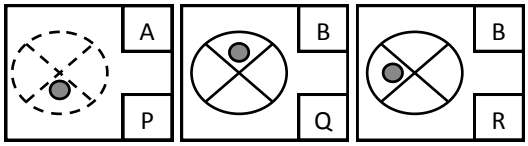

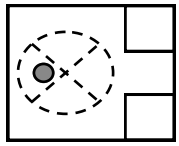

A	A	A	B	P
R	Q	B	P	Q

a b c d e

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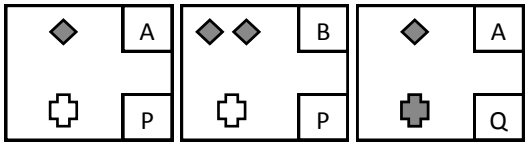

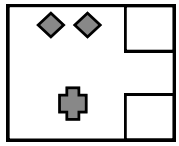

A	B	B	A	P
Q	Q	P	B	Q

a b c d e

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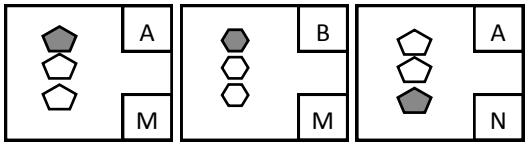

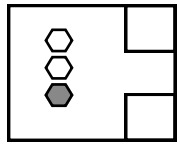

A	A	B	B	M
M	N	N	A	N

a b c d e

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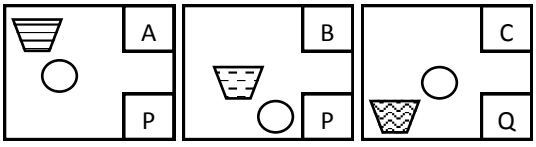
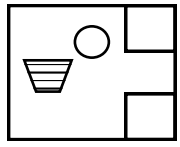
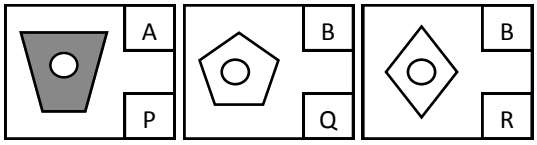
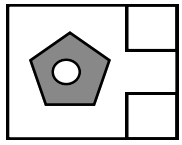




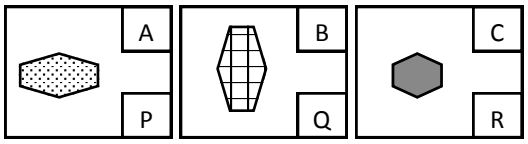
A	B	A	A	P
P	Q	Q	B	Q

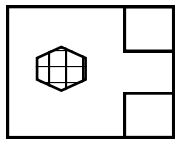
a b c d e

6. 

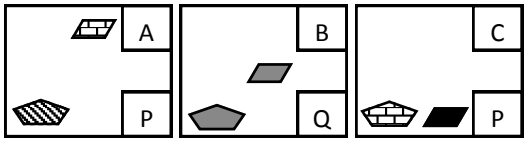


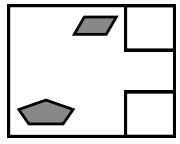
a	b	c	d	e
A	B	B	P	A
R	R	P	Q	Q

7. 

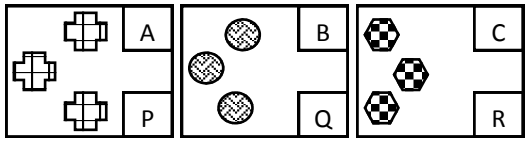


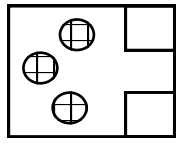
a	b	c	d	e
A	B	A	Q	C
Q	R	R	R	P

8. 

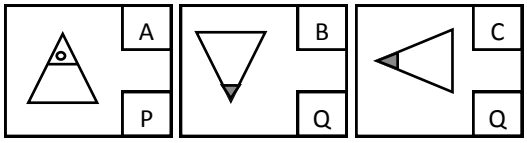


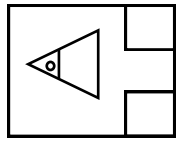
a	b	c	d	e
B	C	A	P	A
P	P	Q	Q	B

9. 

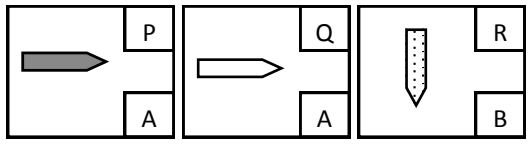


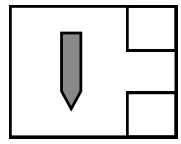
a	b	c	d	e
A	B	B	C	P
R	R	P	Q	Q

10. 

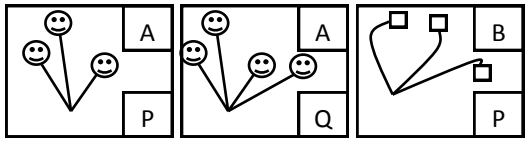


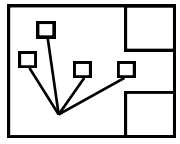
a	b	c	d	e
A	A	B	C	A
Q	R	P	P	B

11. 

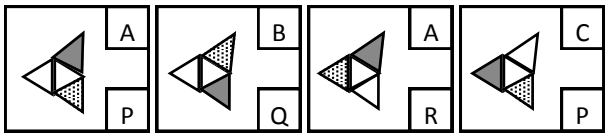


a	b	c	d	e
P	Q	R	P	P
A	B	A	B	R

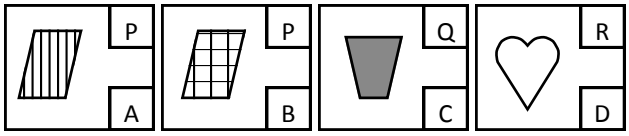
12. 



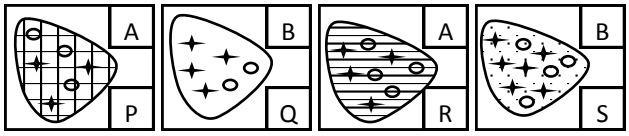
a	b	c	d	e
B	A	P	A	P
Q	Q	B	B	Q

13. 

a	b	c	d	e
A	C	B	C	A
Q	Q	R	R	P

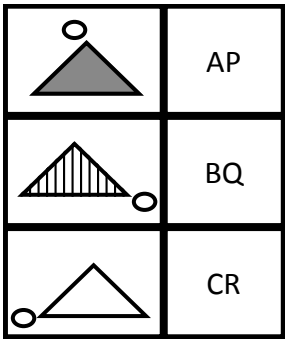
14. 

a	b	c	d	e
P	P	Q	R	P
B	C	D	B	A

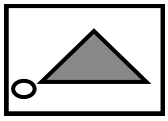
15. 

a	b	c	d	e
A	B	B	B	A
S	S	R	P	B

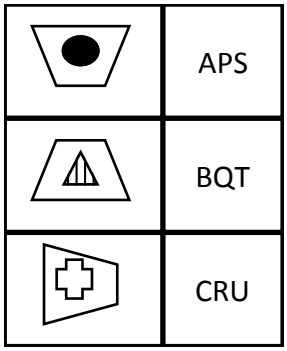
EXAMPLE

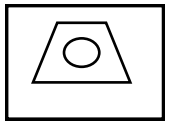
16. 

A stands *for the* ***circle on top corner***
B stands for the ***circle on right corner***
C stands for the ***circle on left corner***
P stands for ***dark shading***
Q stands for ***vertical lines***
R stands for ***no shading***



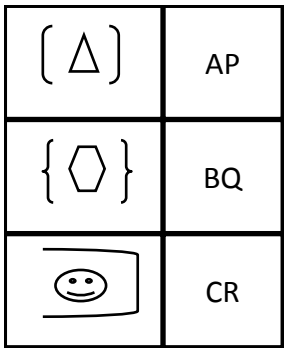
a	b	c	d	e
AQ	CQ	CP	CR	BR

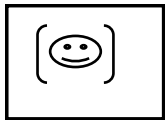
17. 



a	b	c	d	e
BQU	AQU	BPS	BPQ	ATR

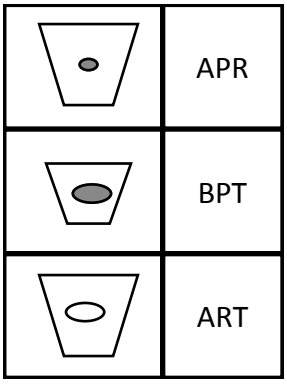
18.

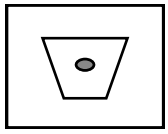




AR	AQ	BR	PQ	AC
a	b	c	d	e

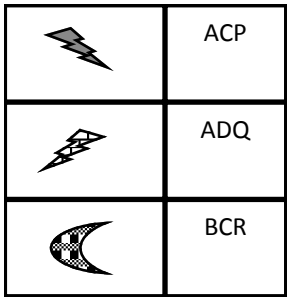
19.

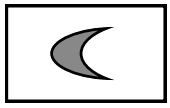




APT	BPR	APB	ATR	ABR
a	b	c	d	e

20.





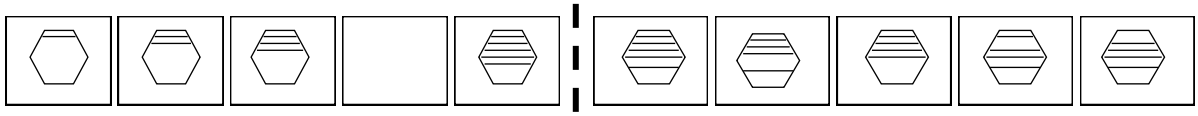
ADC	PQR	BPQ	BDA	BCP
a	b	c	d	e

Attempts	No. of Corrections	Date	Sign
Attempt 1			
Attempt 2			

SERIES

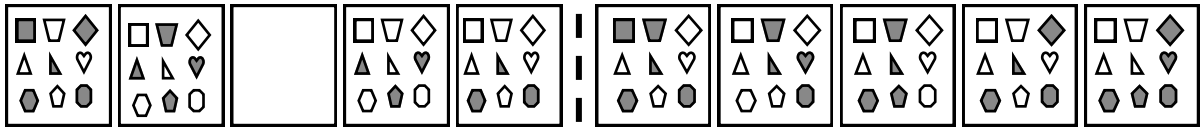
Find the shape or pattern which completes or continues the given series.

EXAMPLE



Explanation: Horizontal lines are increasing by one.

1.



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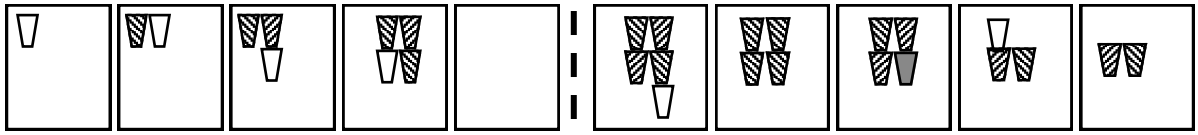

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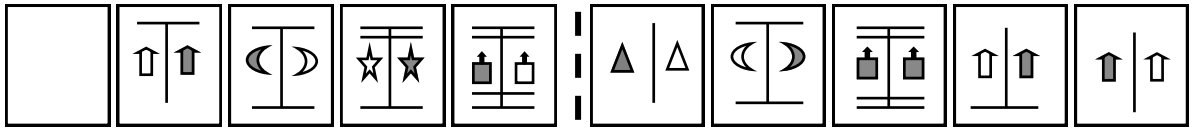

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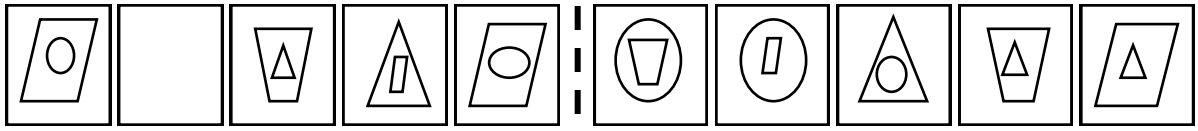

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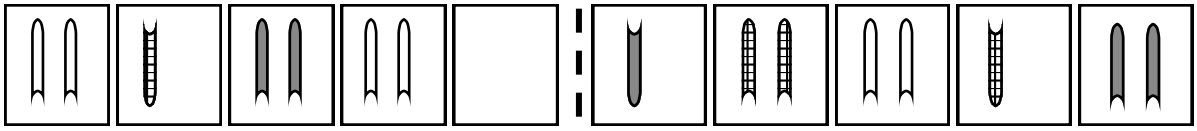

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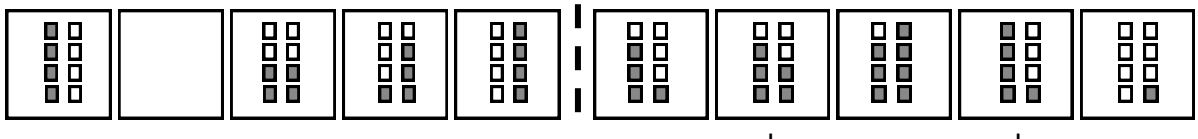

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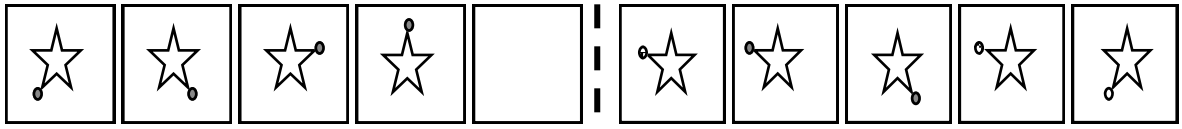

a b c d e

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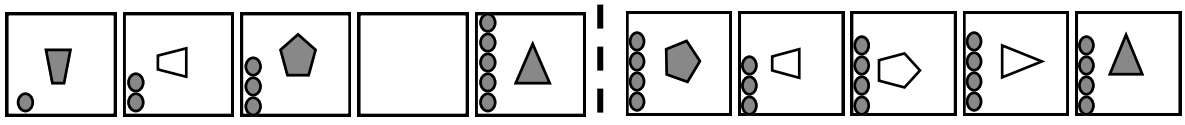

a b c d e

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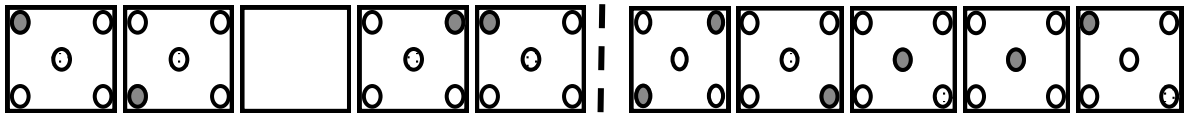

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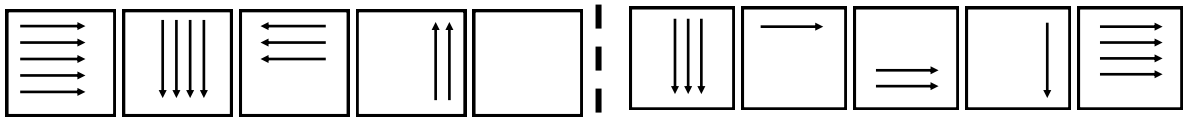

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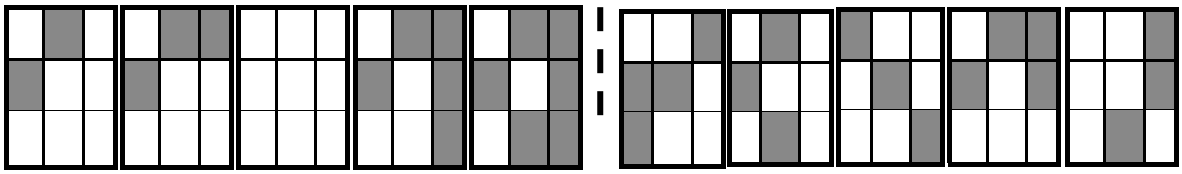

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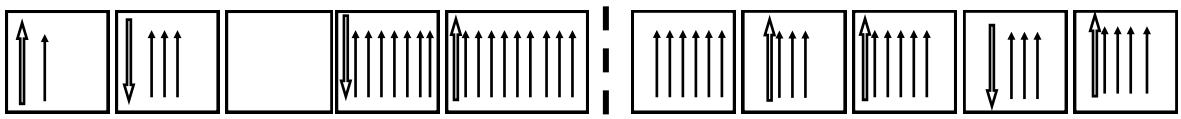

a b c d e

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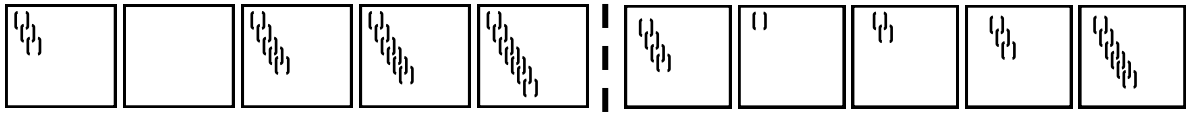

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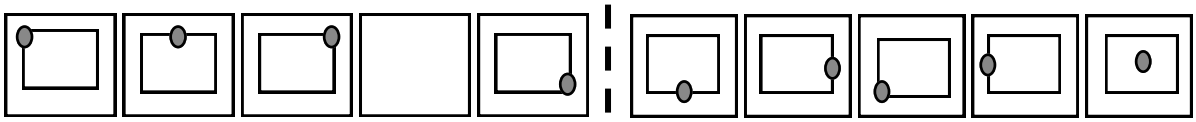
14. 

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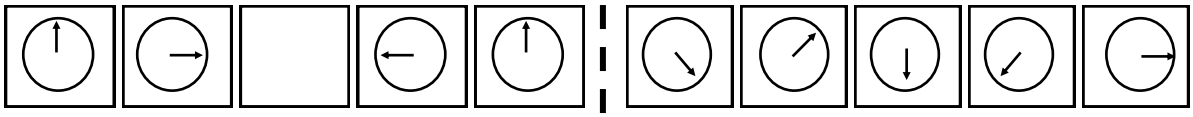
15. 

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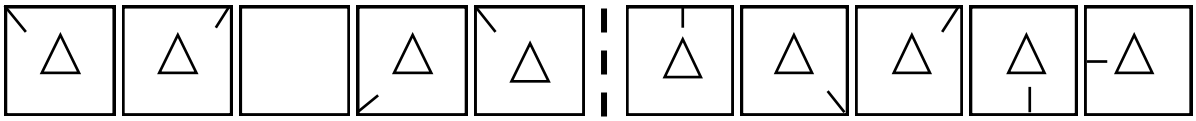
16. 

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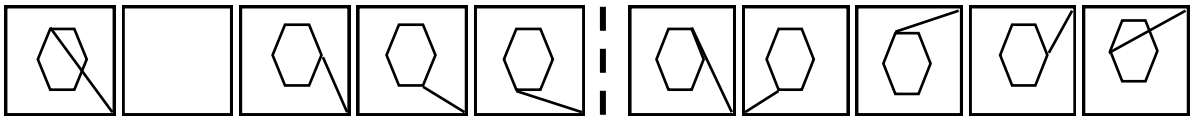
17. 

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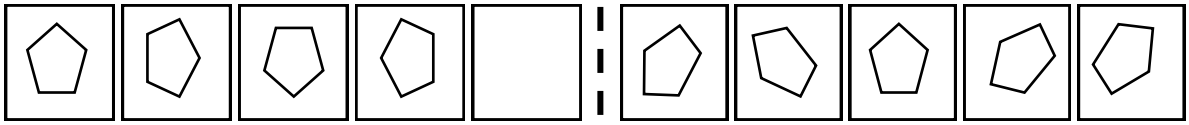
18. 

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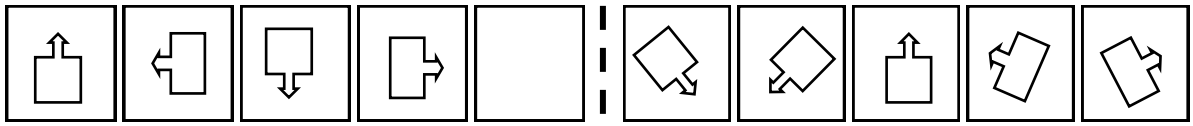
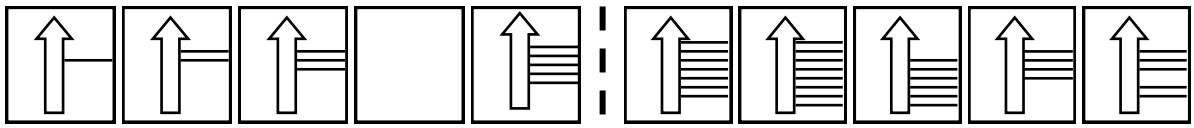
19. 

a b c d e

20. 

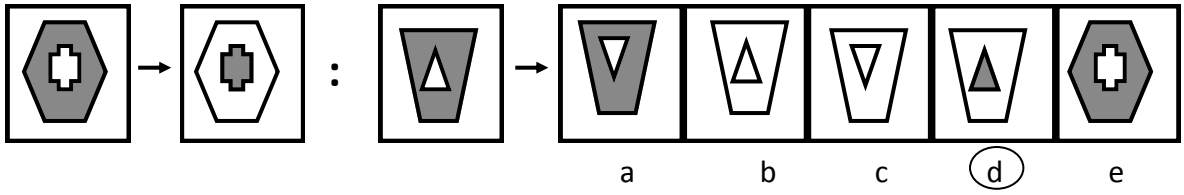
a b c d e

Attempts	No. of Corrections	Date	Sign
Attempt 1			
Attempt 2			

ANALOGY

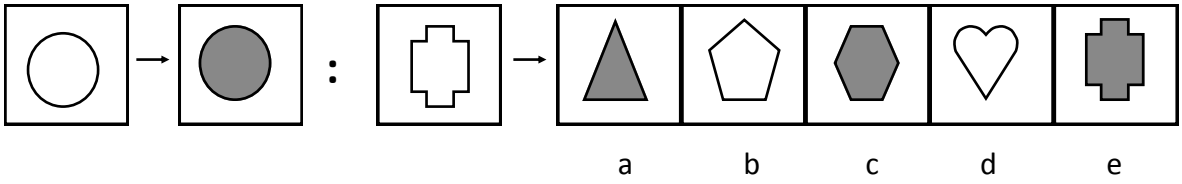
Find the shape or pattern which completes the second pair in the same way as the first pair.

EXAMPLE



Explanation: in the original figure, the outer shaded shape becomes unshaded. The inner figure becomes shaded.

1.



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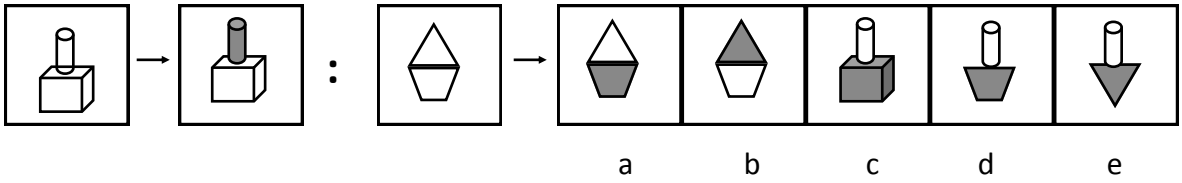

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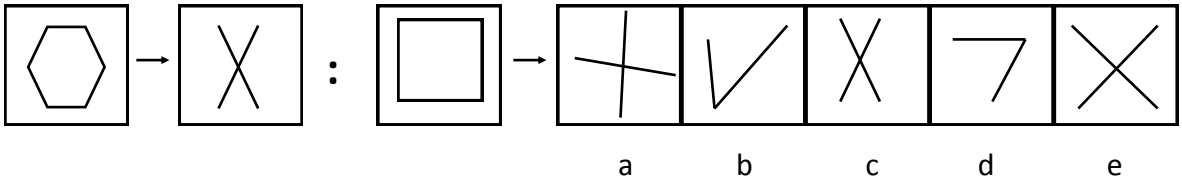

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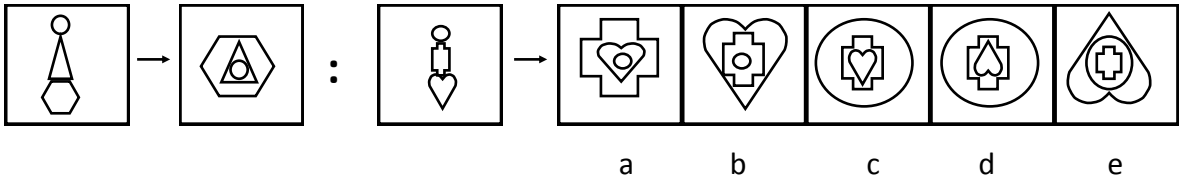

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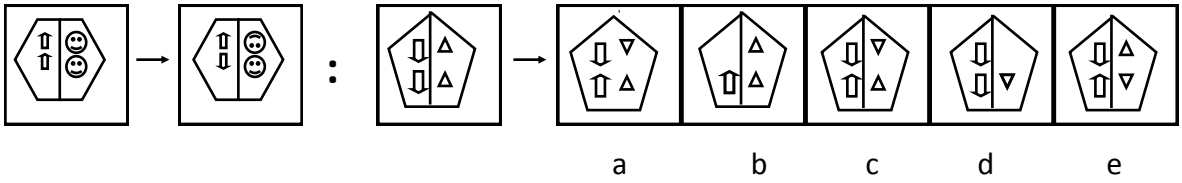
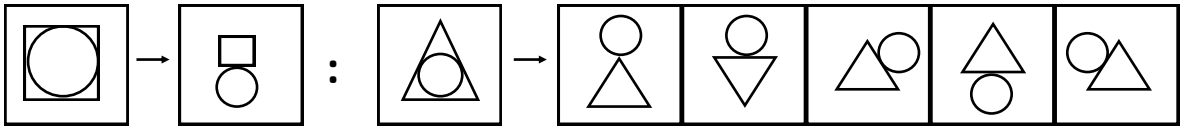
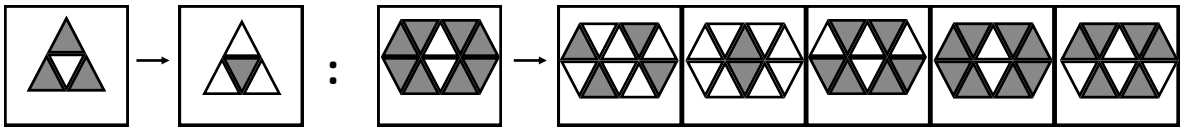
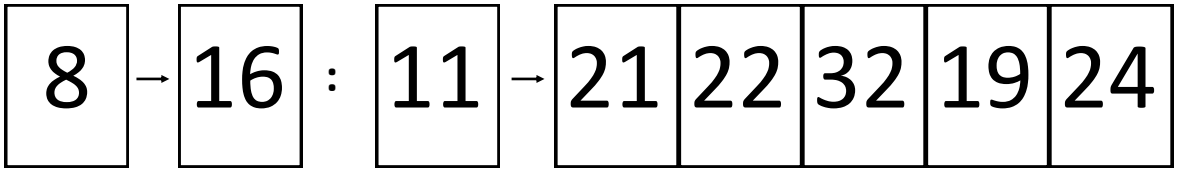


6. 

a b c d e

7. 

a b c d e

8. 

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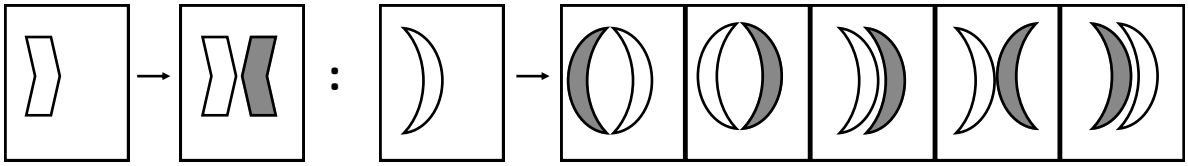
9. 

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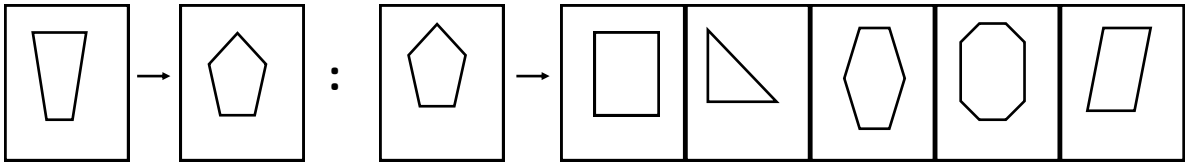
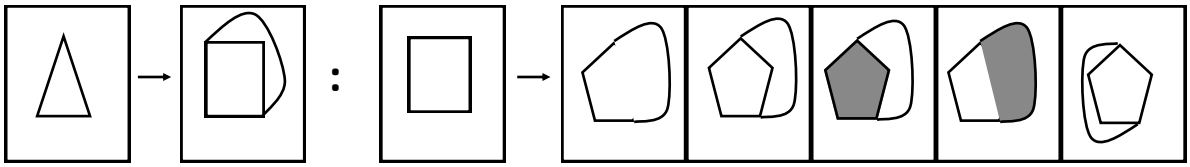
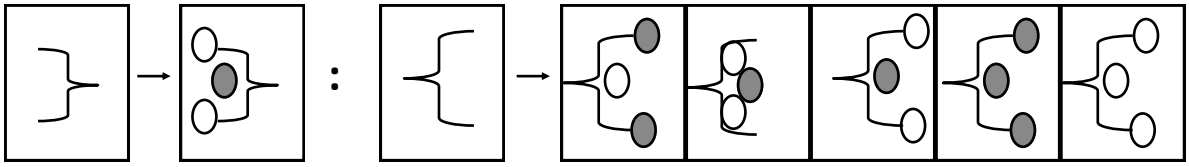
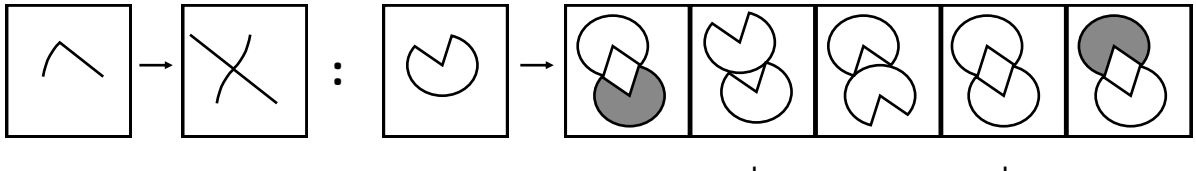
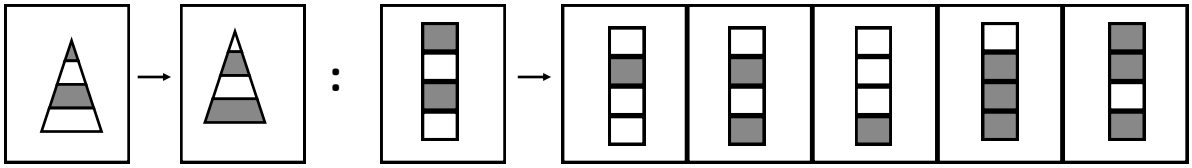
10. 

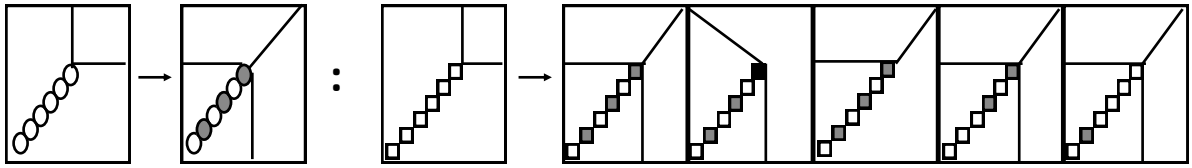
a b c d e

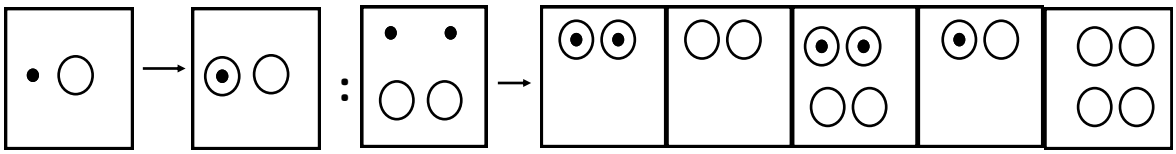
11. 

12. 

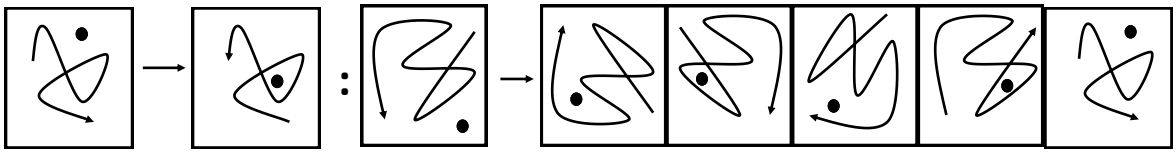
13. 

14. 

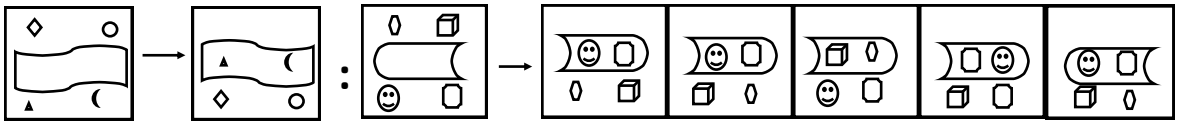
15. 

16. 

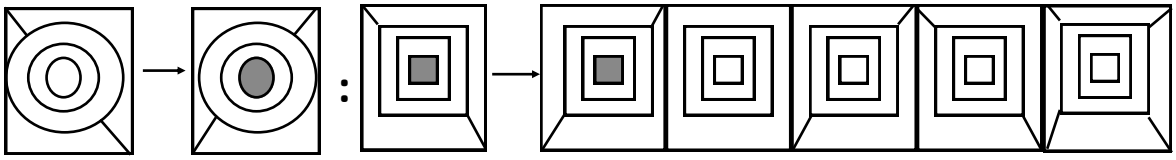
a b c d e

17. 

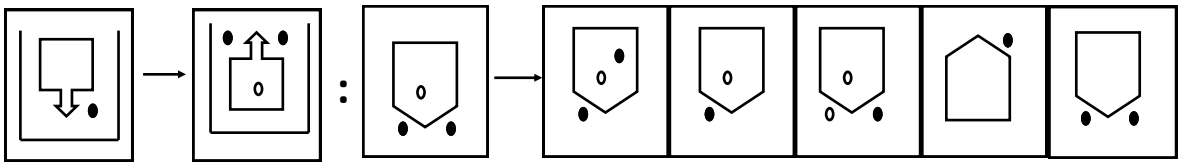
a b c d e

18. 

a b c d e

19. 

a b c d e

20. 

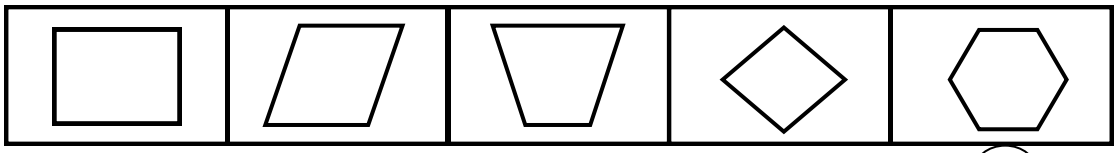
a b c d e

Attempts	No. of Corrections	Date	Sign
Attempt 1			
Attempt 2			

ODD ONE OUT

Which one is odd?

EXAMPLE



Explanation: every single shape has the same number of sides, except one.

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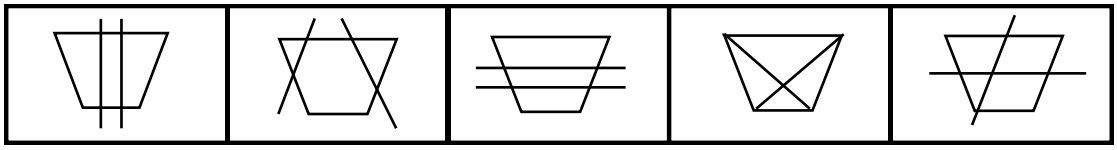

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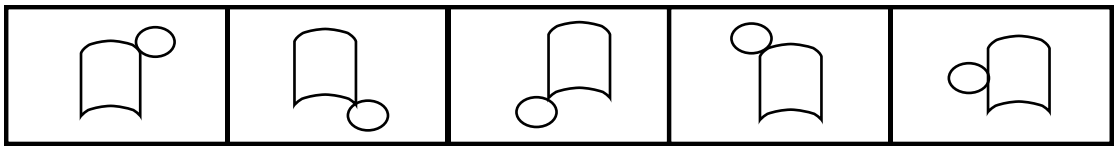

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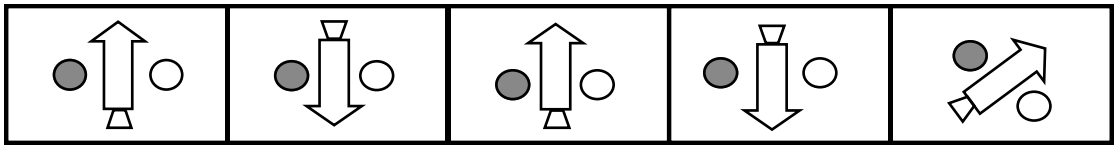

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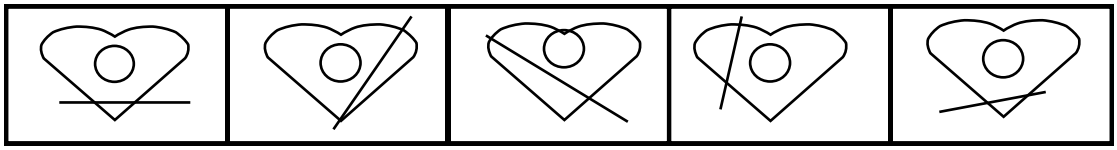

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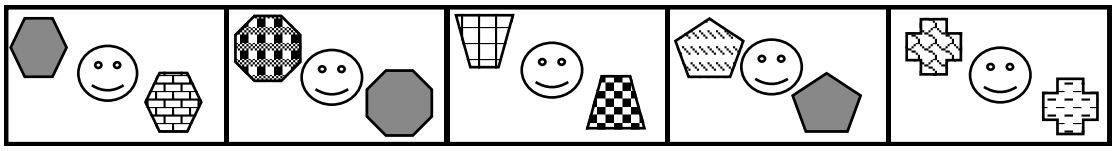

a b c d e

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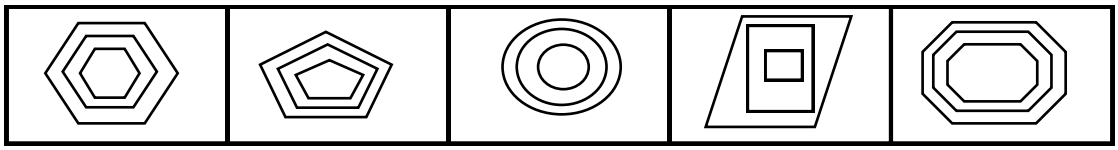

a b c d e

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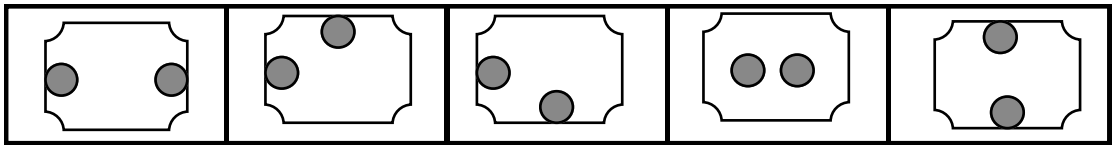

a b c d e

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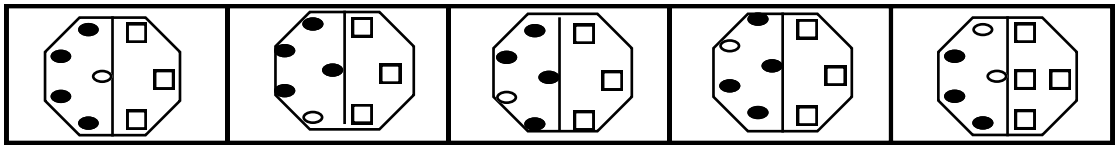

a b c d e

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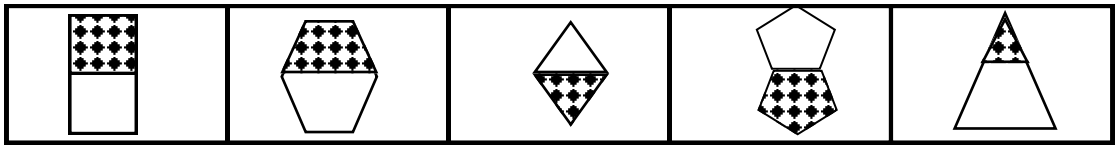

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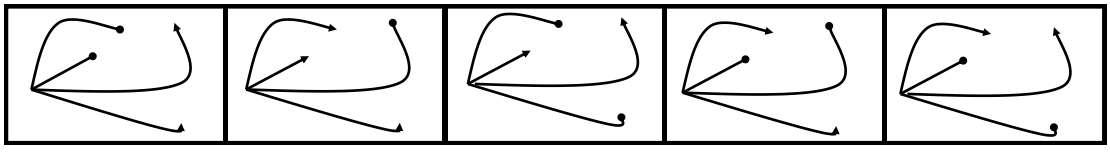

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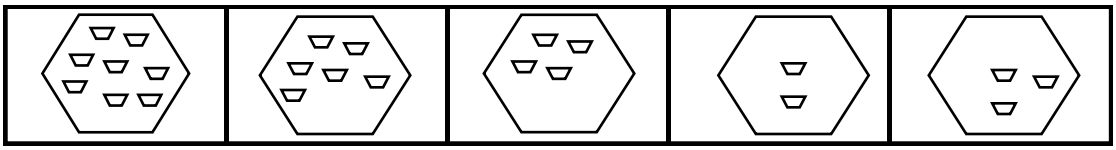

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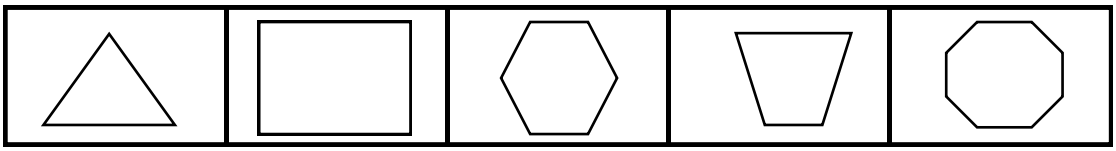

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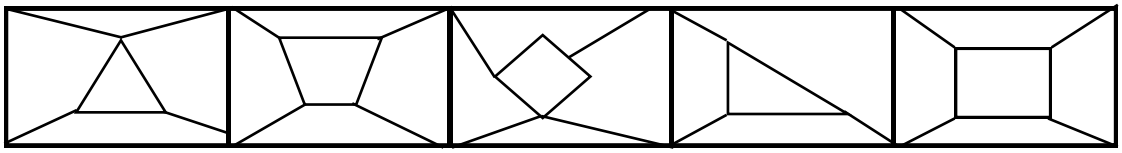

a b c d e

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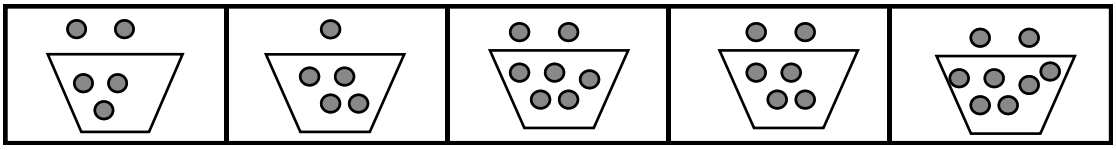

a b c d e

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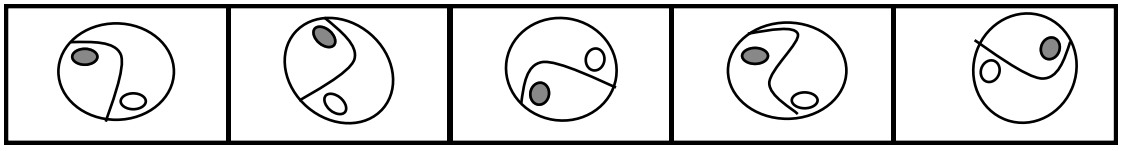

a b c d e

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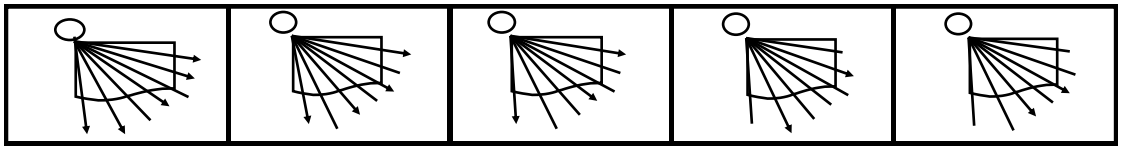

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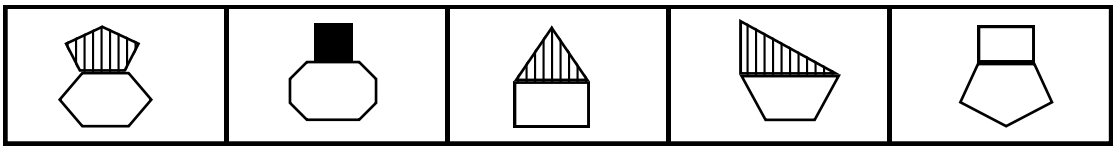

a b c d e

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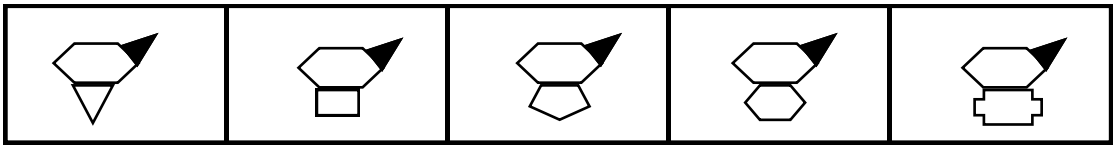

a b c d e

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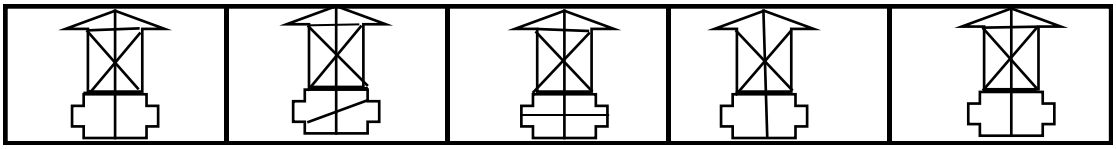
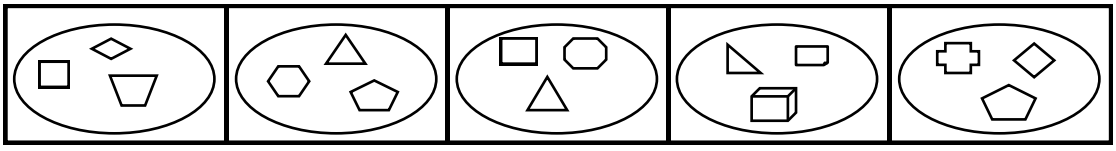


a b c d e

20.



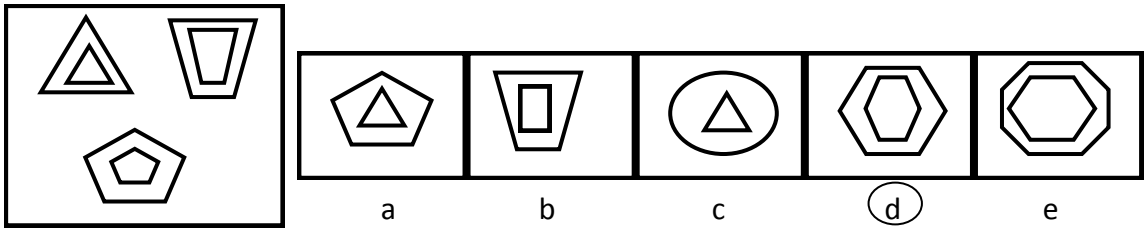
a b c d e

Attempts	No. of Corrections	Date	Sign
Attempt 1			
Attempt 2			

SIMILARITY

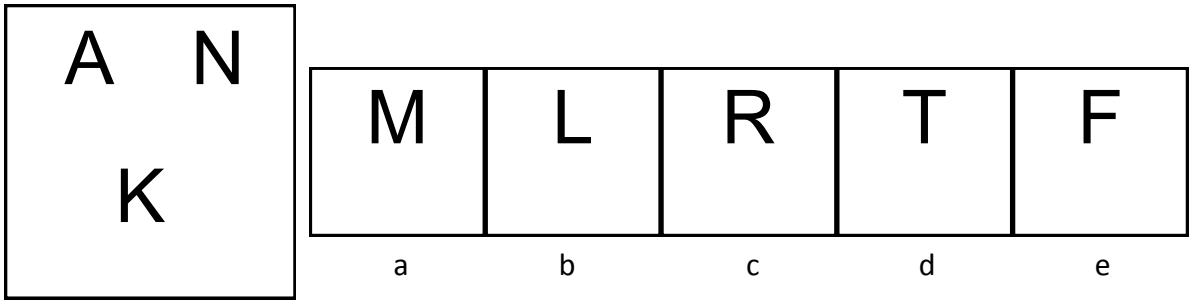
Choose the shape or pattern from the right-hand side that belongs to the set on the left hand side.

EXAMPLE



Explanation: in the original shapes, the outer and inner figures are the same.

1.



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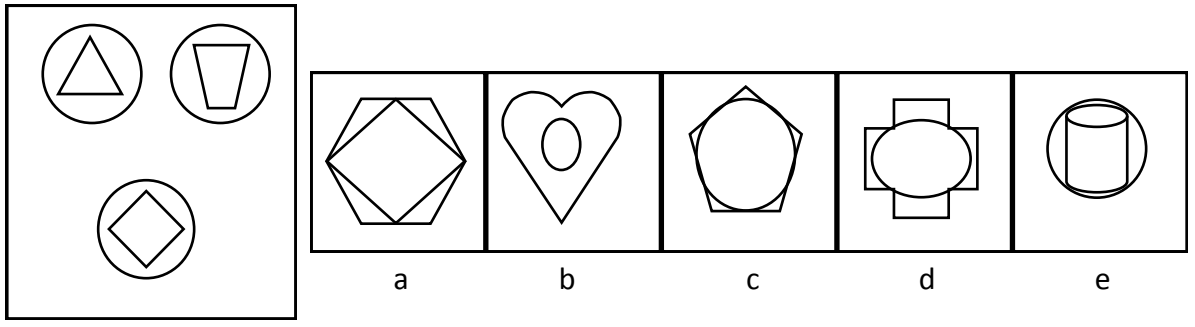

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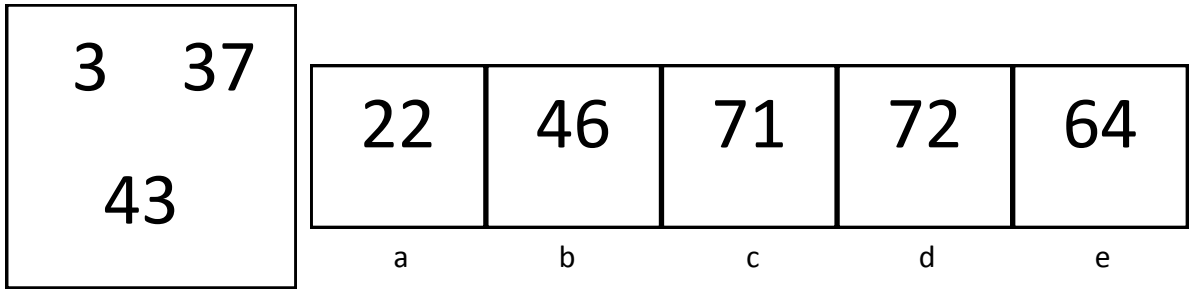

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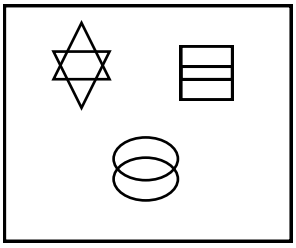

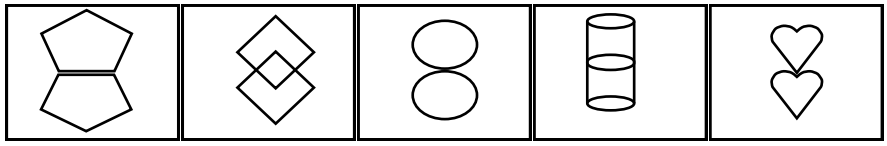

a b c d e

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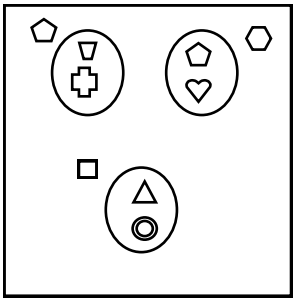

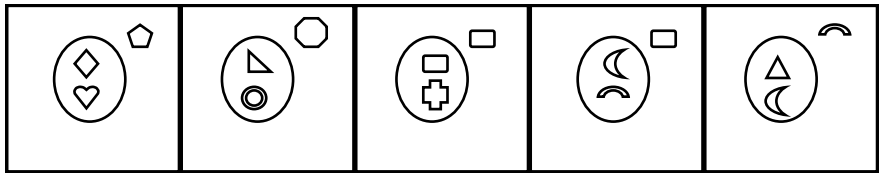

a b c d e

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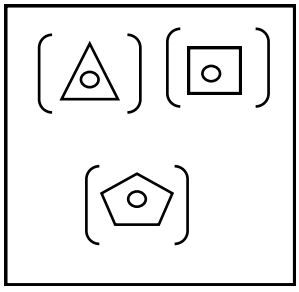

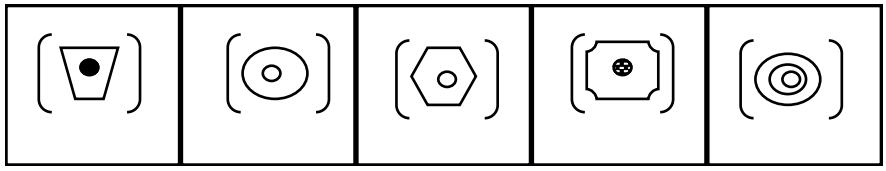

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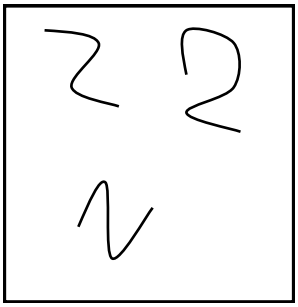

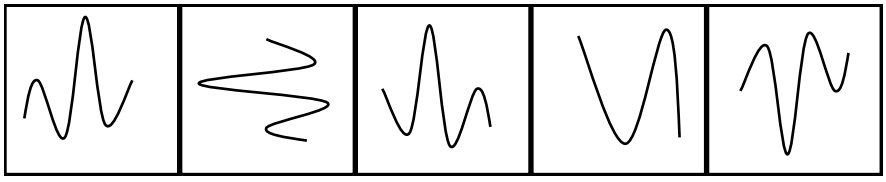

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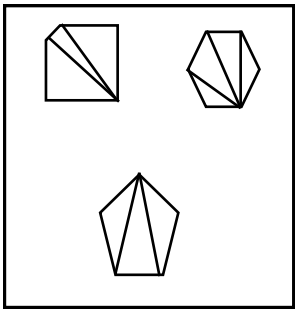

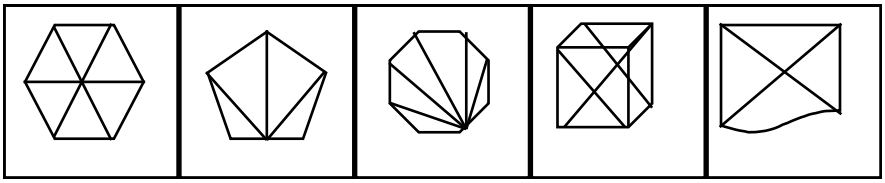

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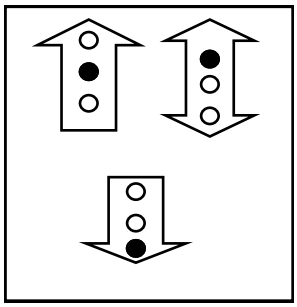

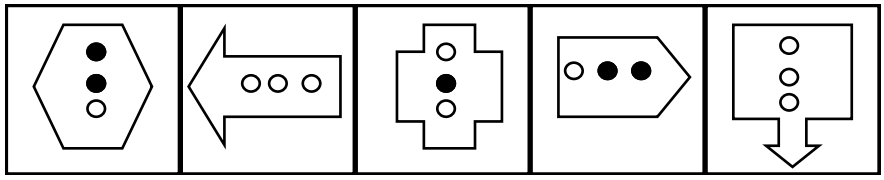

a b c d e

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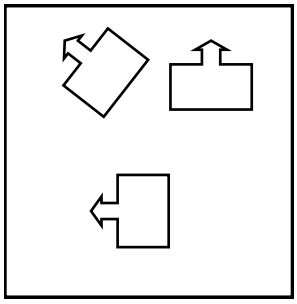

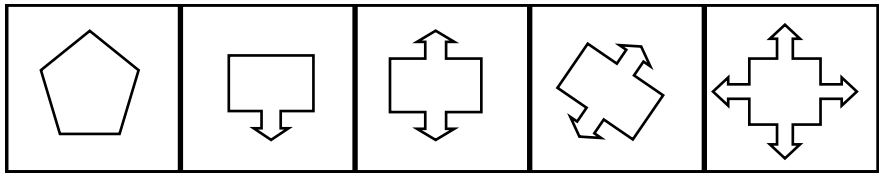

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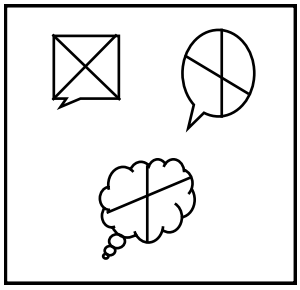

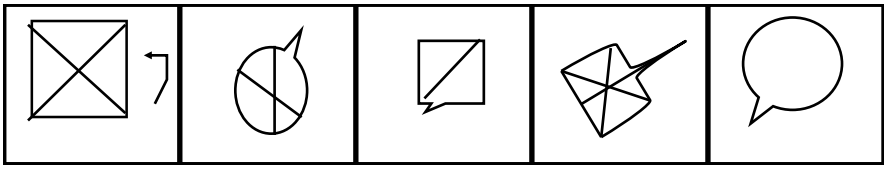

a b c d e

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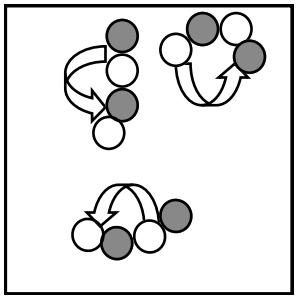

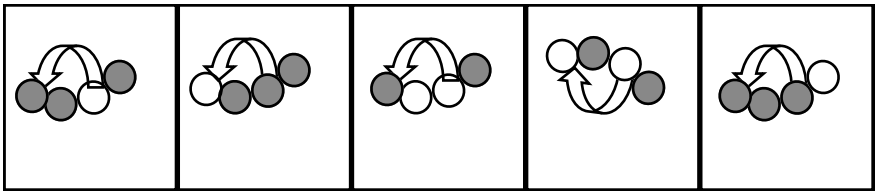

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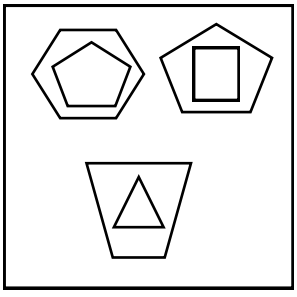

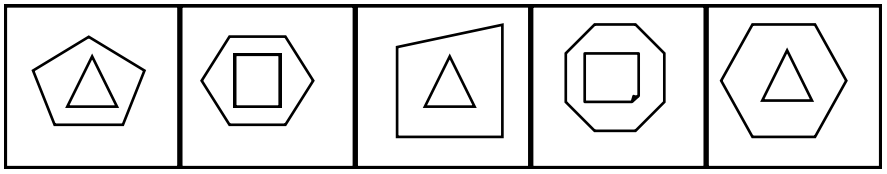

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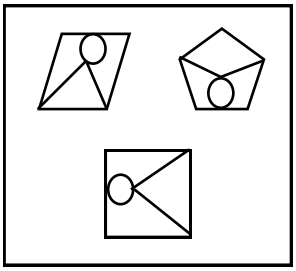

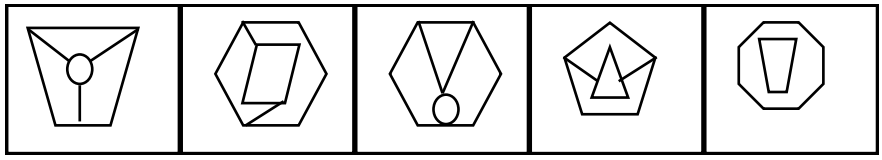

a b c d e

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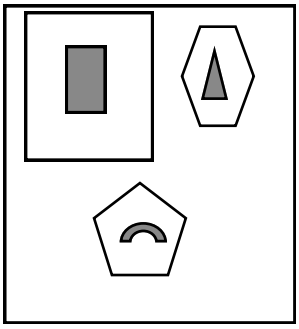

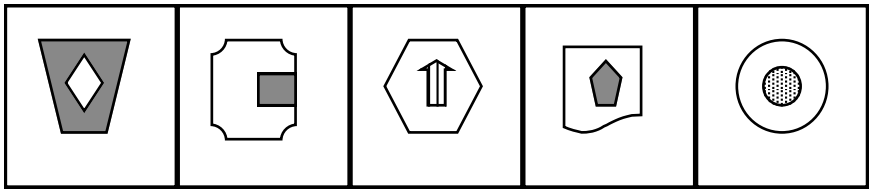

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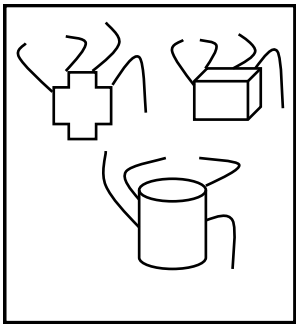

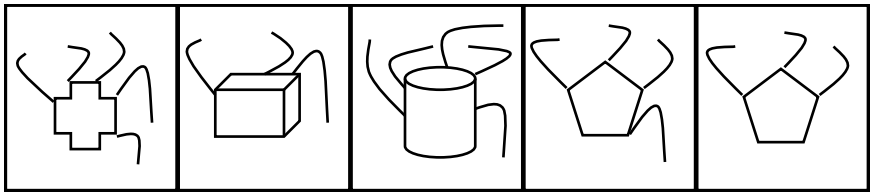

a b c d e

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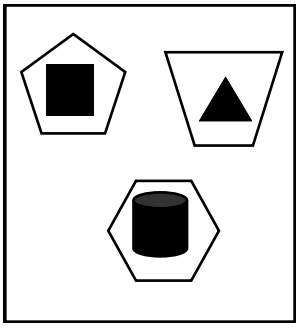

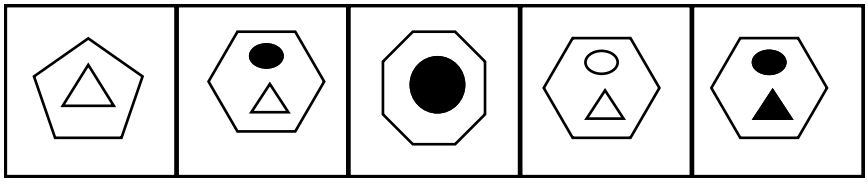

a b c d e

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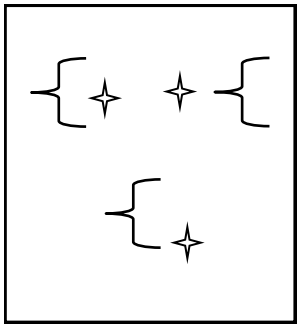

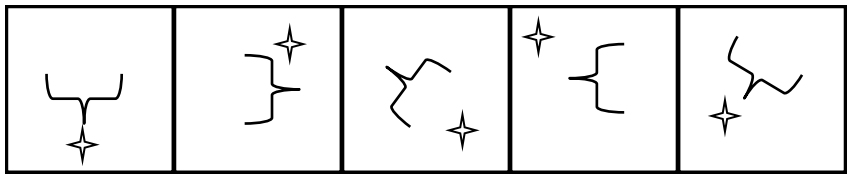

a b c d e

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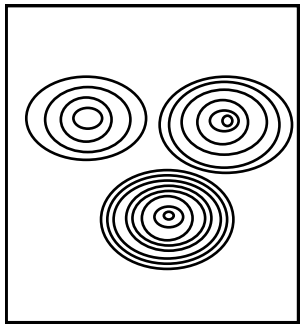

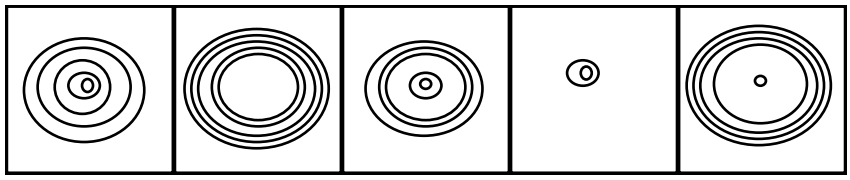

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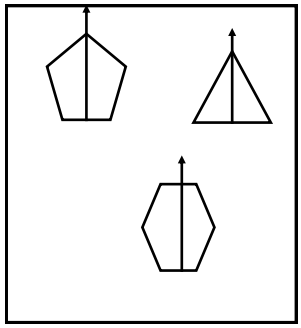
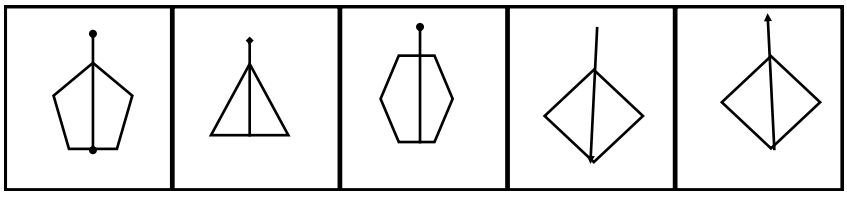




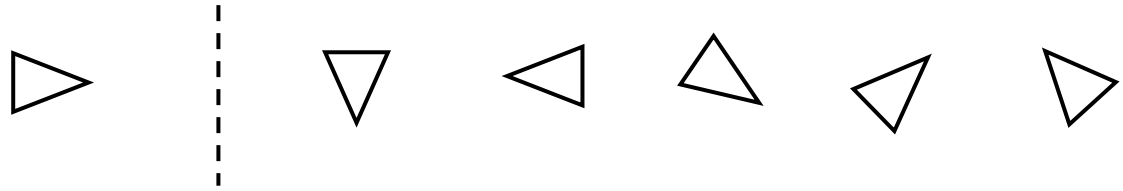
a b c d e

Attempts	No. of Corrections	Date	Sign
Attempt 1			
Attempt 2			

REFLECTION

Which shape on the right is the reflection of the shape on the left?

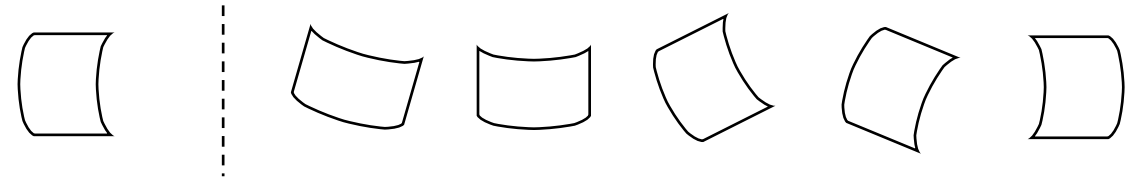
EXAMPLE



a b c d e

Explanation: the original shape is facing towards the mirror, so the answer must also be facing towards the mirror.

1.



a b c d e

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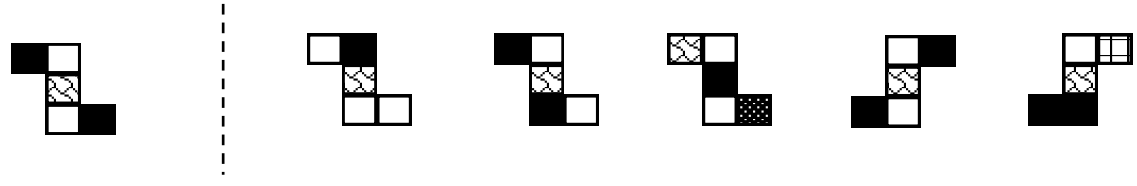

a b c d e

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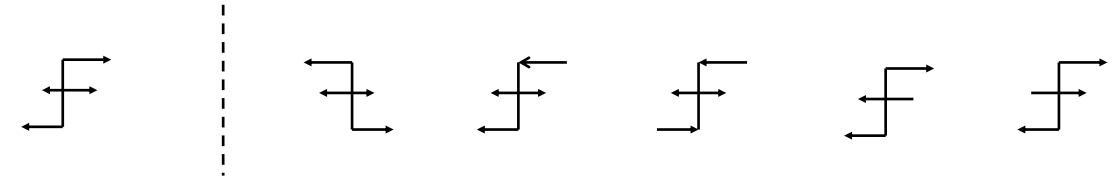

a b c d e

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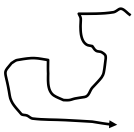
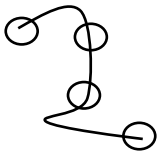
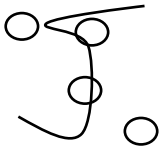
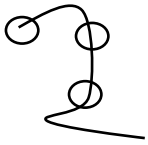
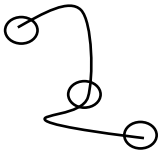
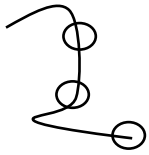
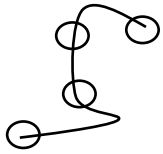
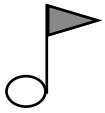
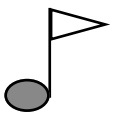
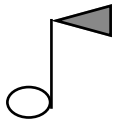
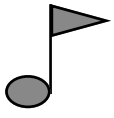
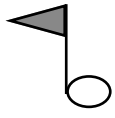
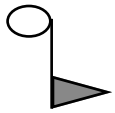
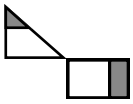
a b c  d e

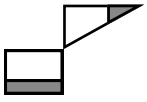
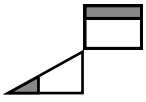
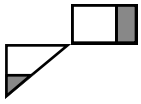
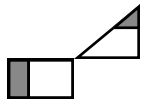
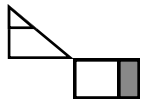
5. 

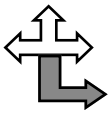
a  b  c  d  e 

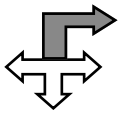
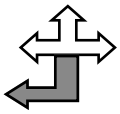
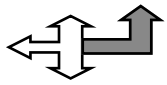
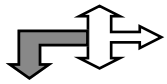
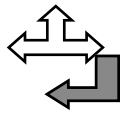
6. 

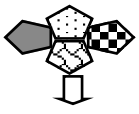
a  b  c  d  e 

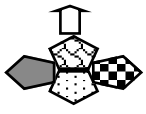
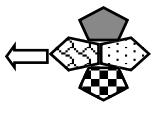
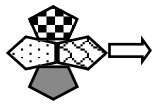
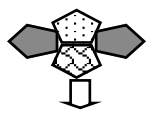
7. 

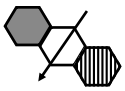
a  b  c  d  e 

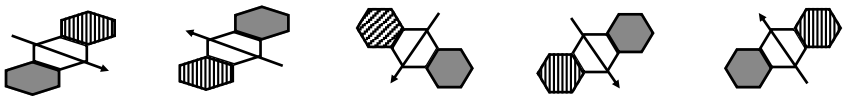
8. 

a  b  c  d  e 

9. 

a  b c  d  e 

10. 



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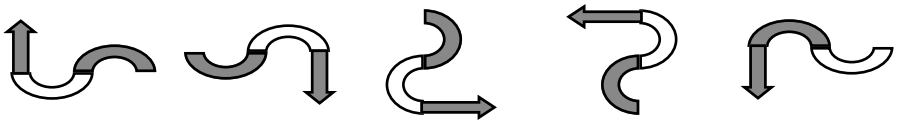

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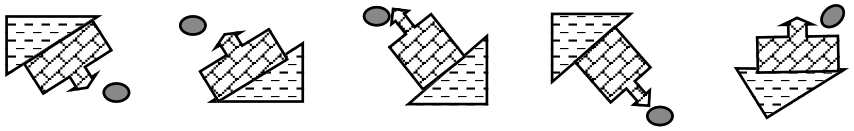

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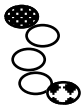
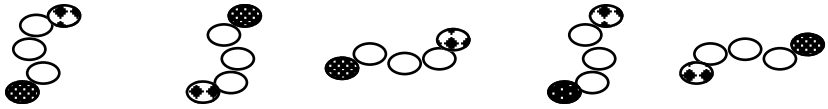
13. 



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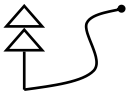
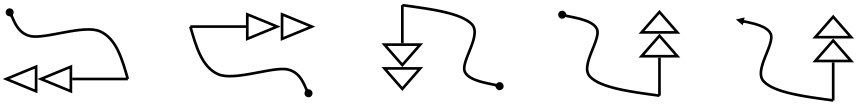
14. 



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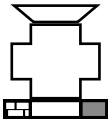
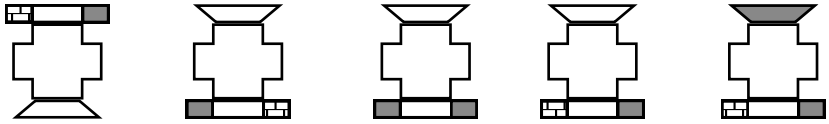
15. 



a b c d e

16.

a

b

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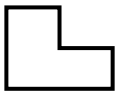
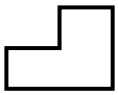
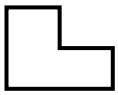
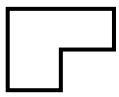
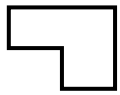
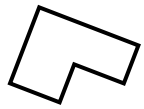
17. 

a 

b 

c 

d 

e 

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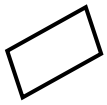
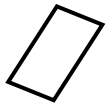
b 

c 

d

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19.

a

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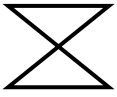
20. 

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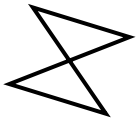
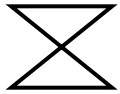
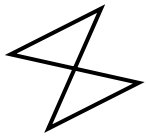
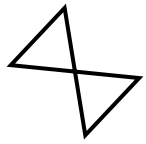
b 

c 

d 

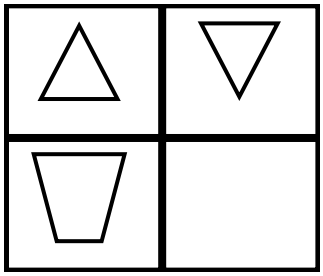
e 

Attempts	No. of Corrections	Date	Sign
Attempt 1			
Attempt 2			

MATRIX

Which one comes in the next square?

EXAMPLE

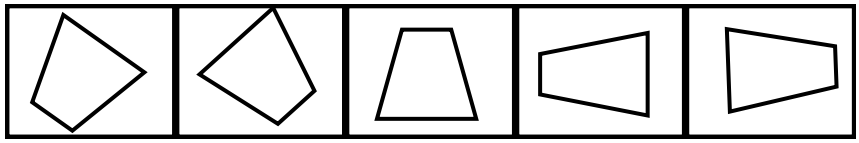


The top left shape : up ward

The top right shape : down ward

The bottom left: up ward

The bottom down : down ward



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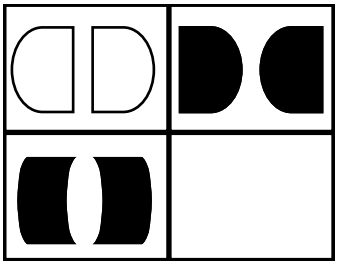

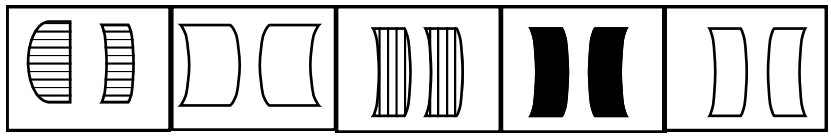

a b c d e

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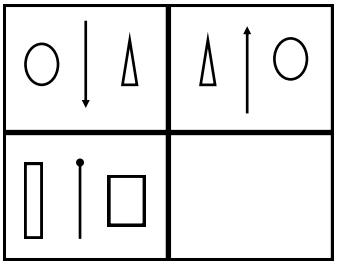

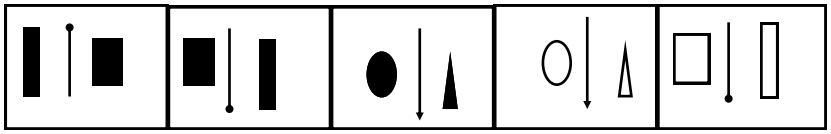

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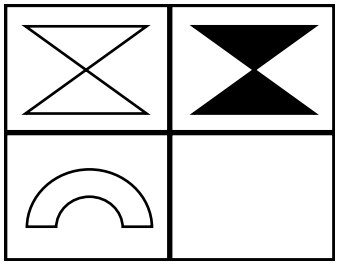

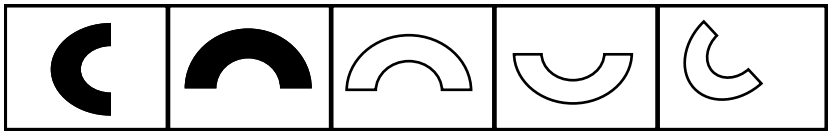

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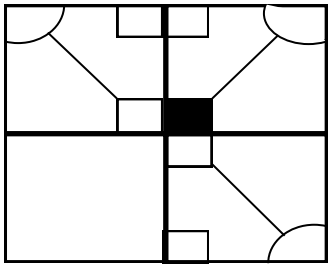

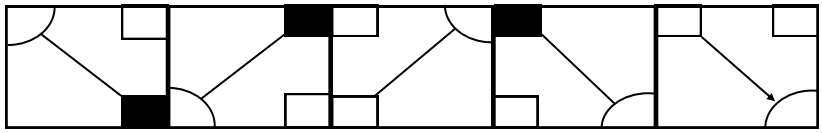

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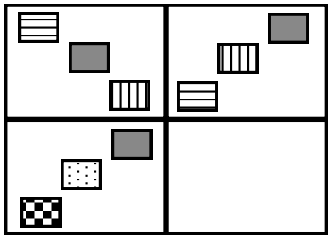

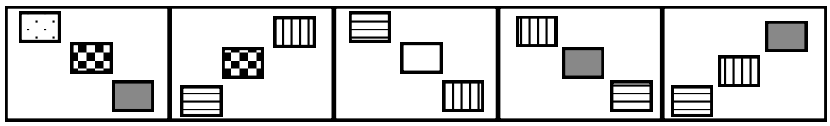

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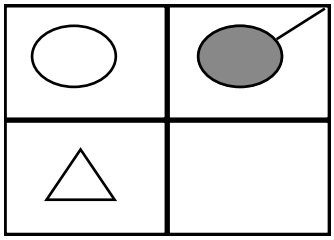

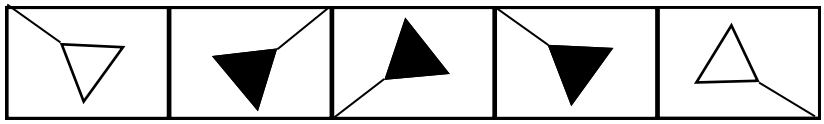

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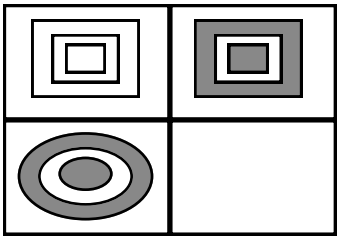

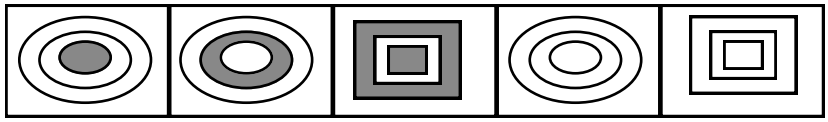

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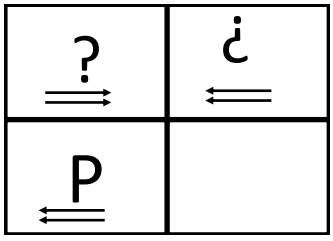

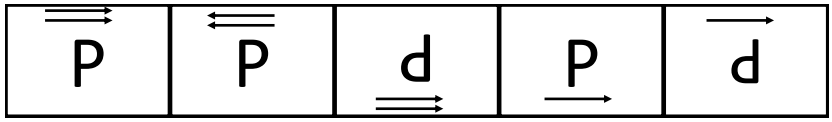

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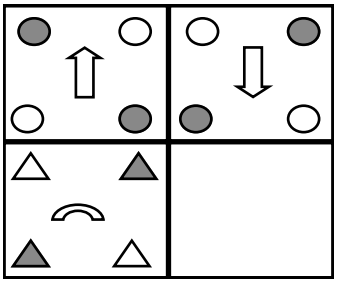

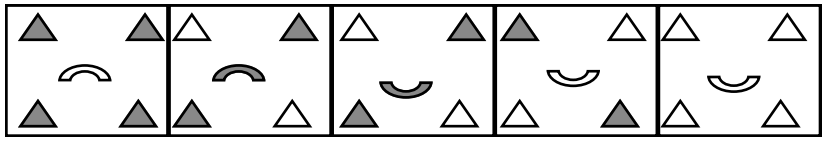

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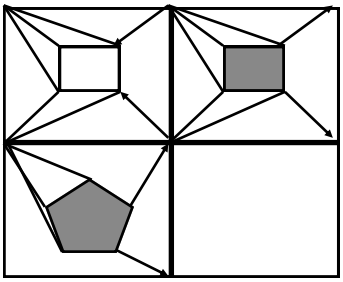

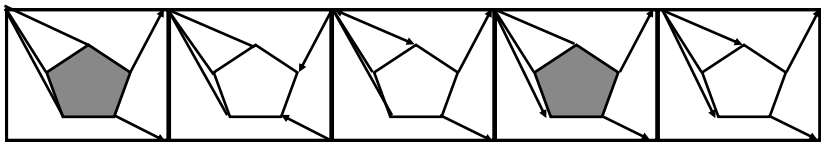

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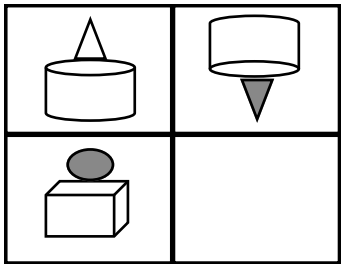

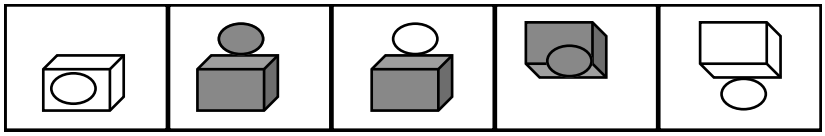

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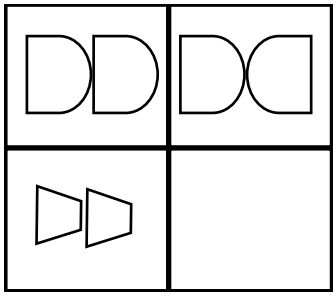

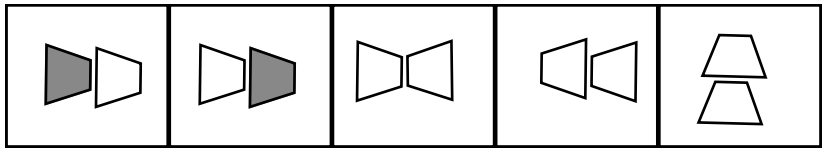

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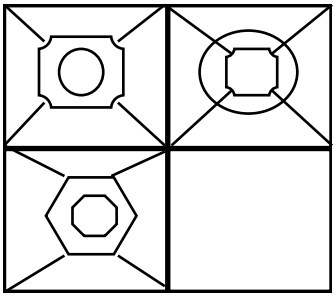

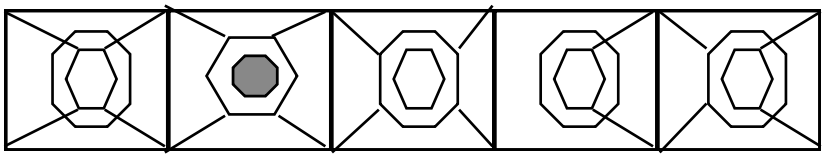

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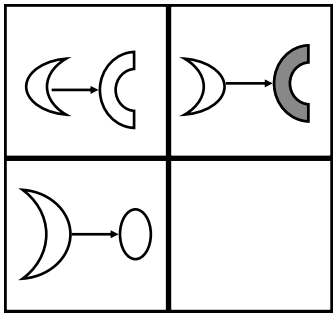

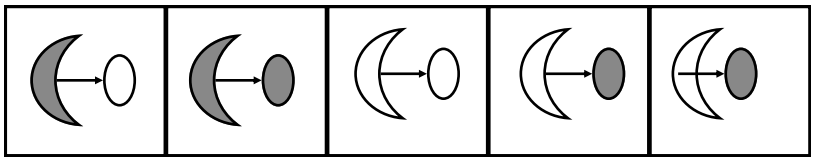

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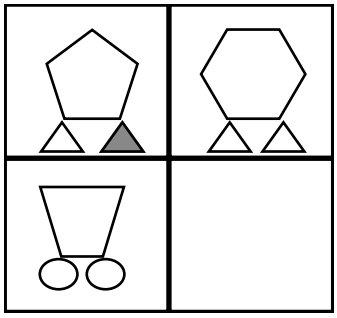

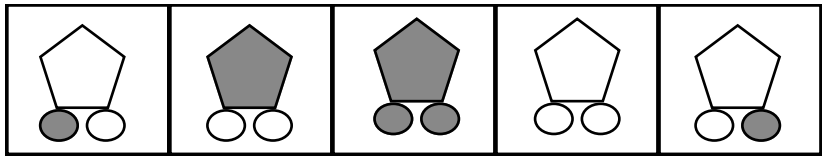

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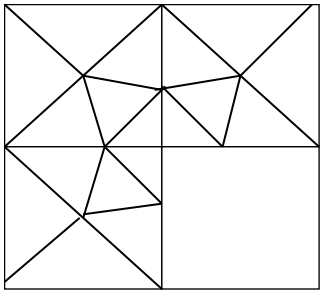

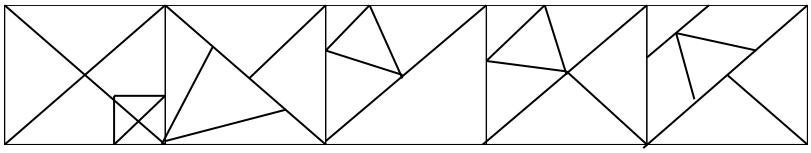

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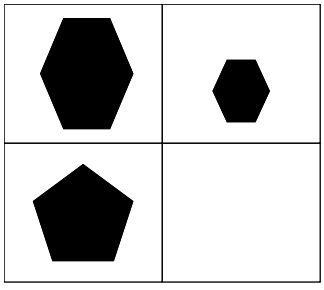

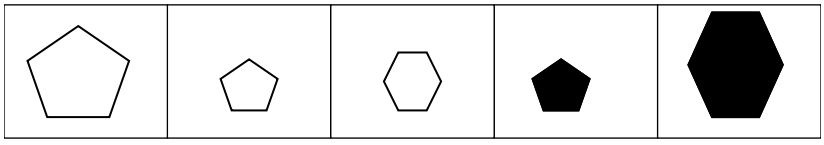

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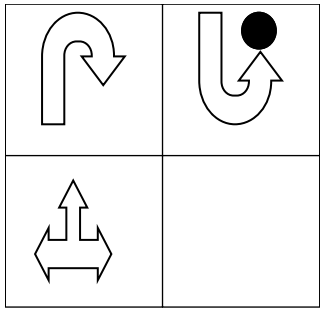

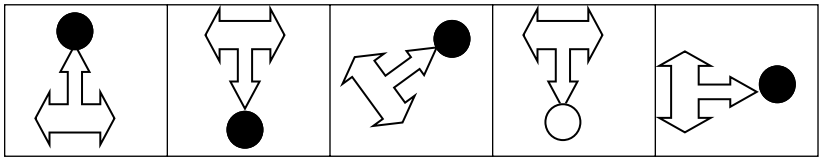

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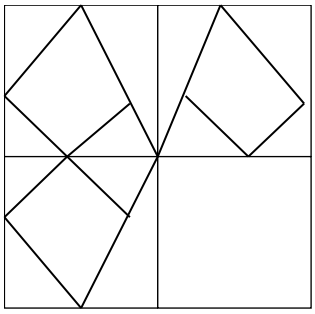

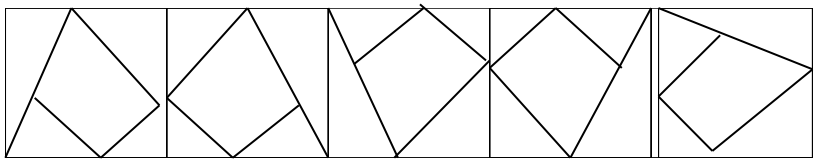

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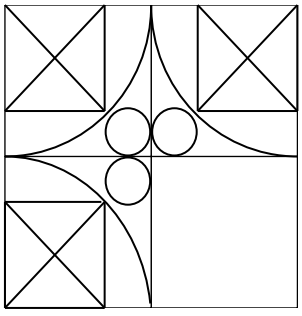

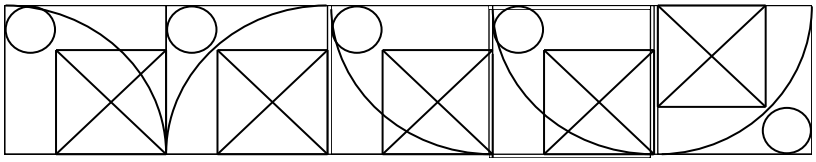

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Attempts	No. of Corrections	Date	Sign
Attempt 1			
Attempt 2			

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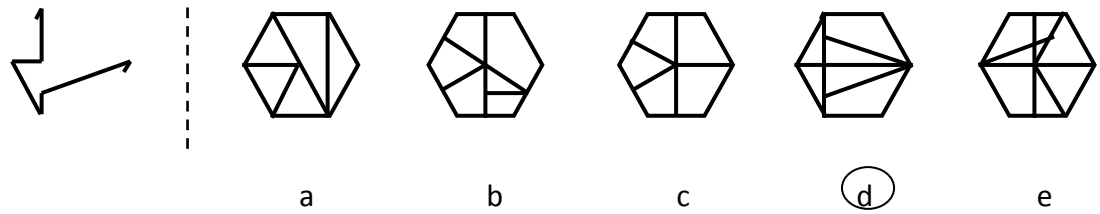

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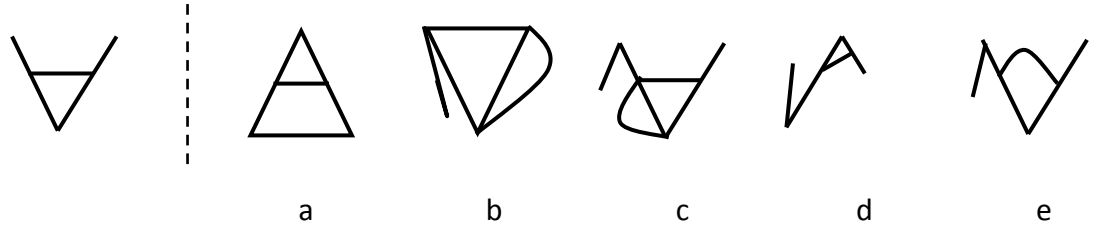

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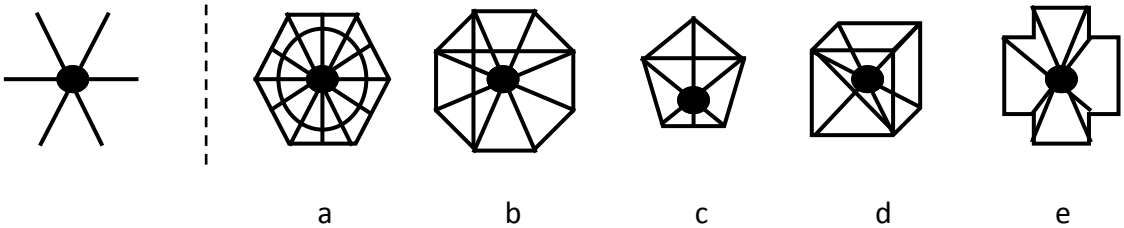

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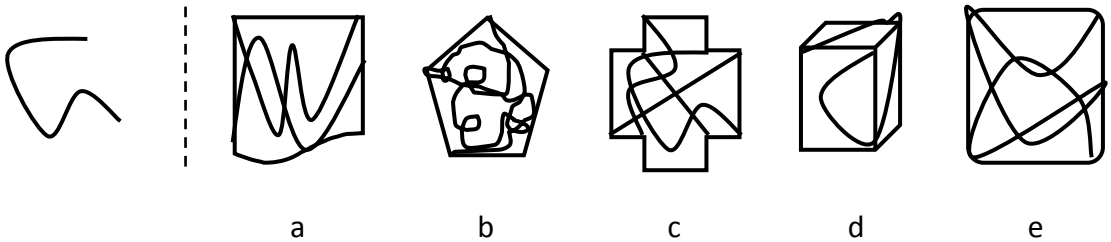

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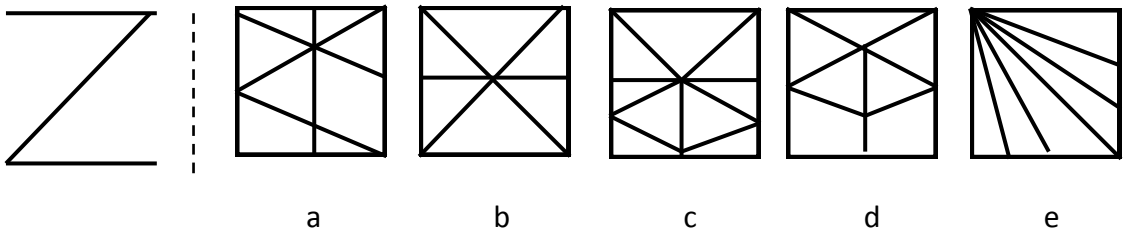

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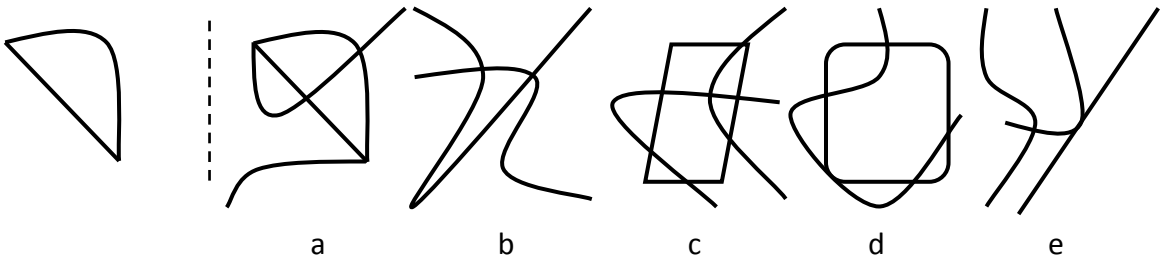

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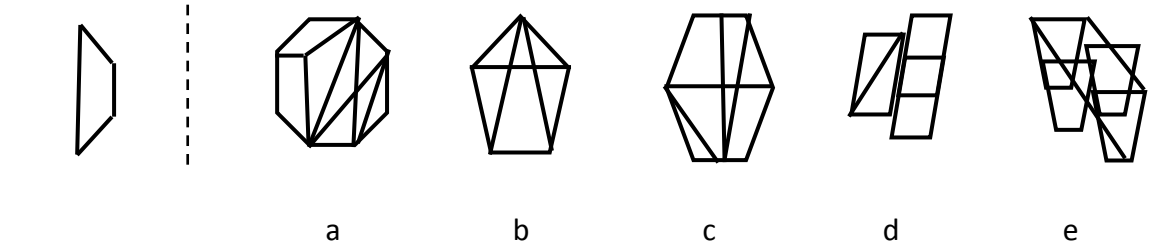

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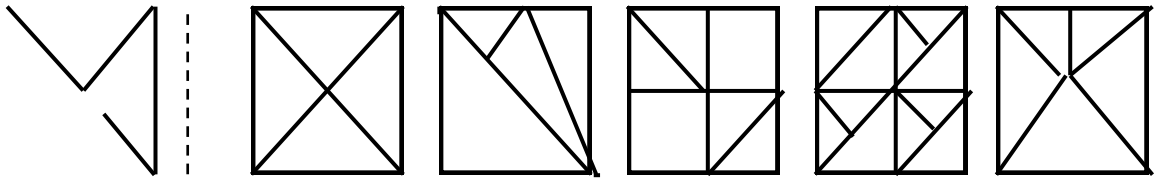

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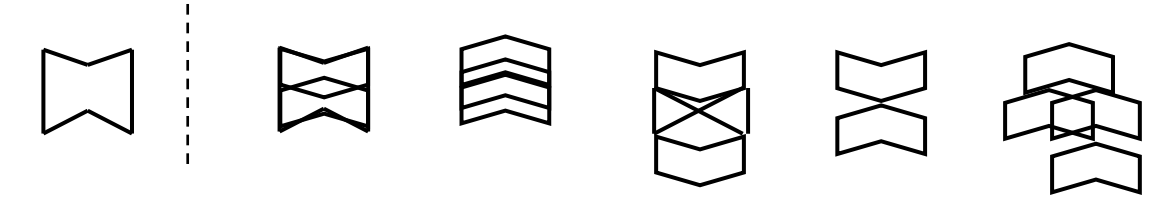

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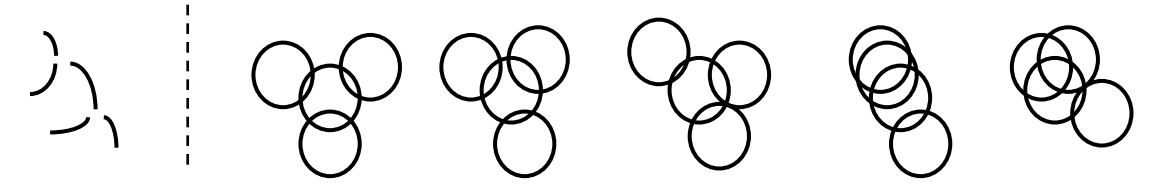

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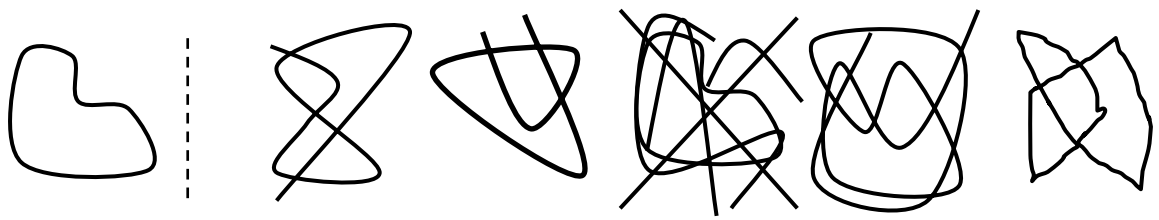

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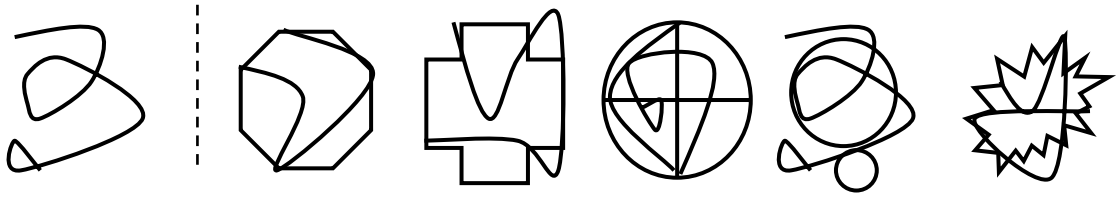

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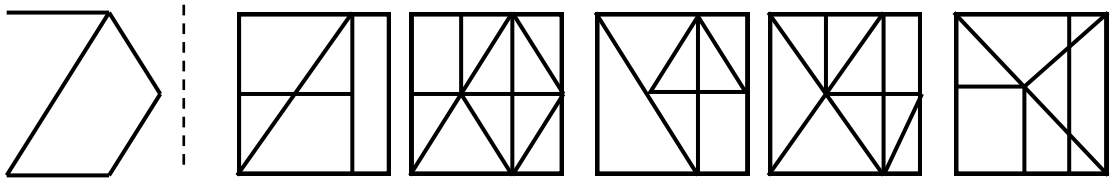

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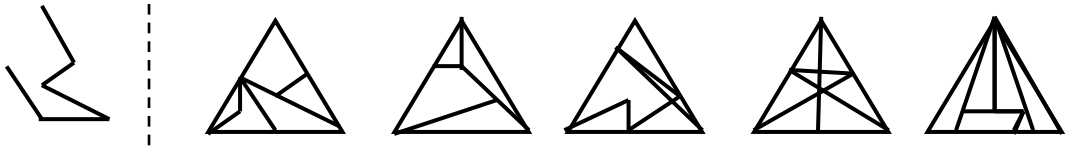

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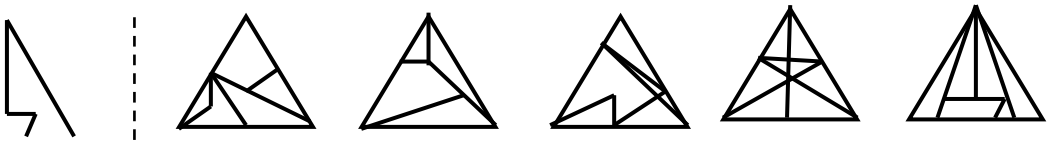

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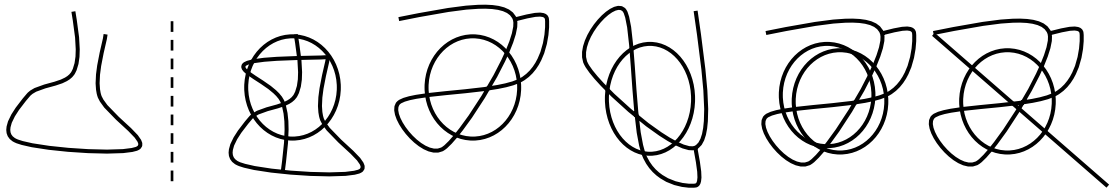

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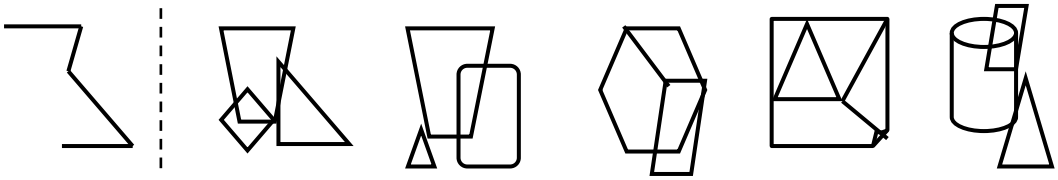

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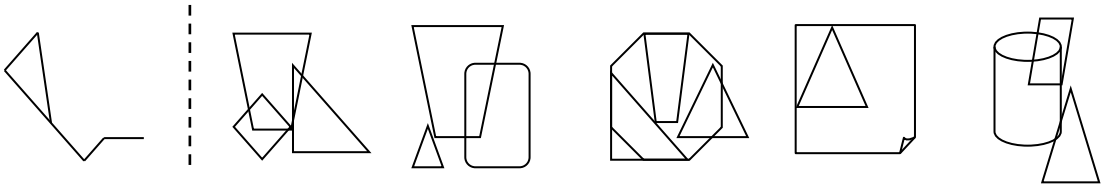

a b c d e

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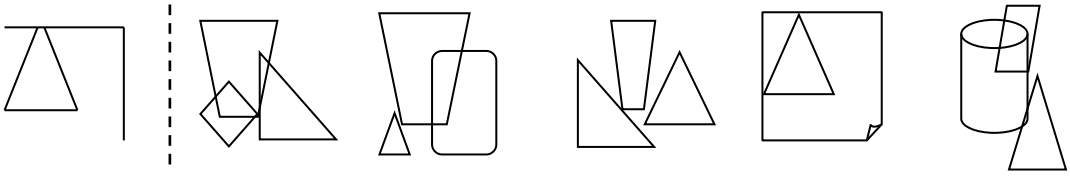

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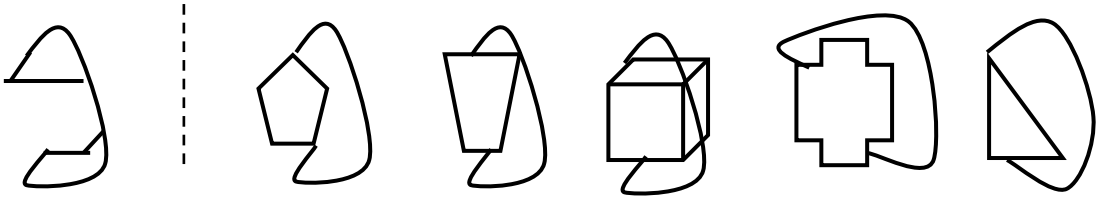

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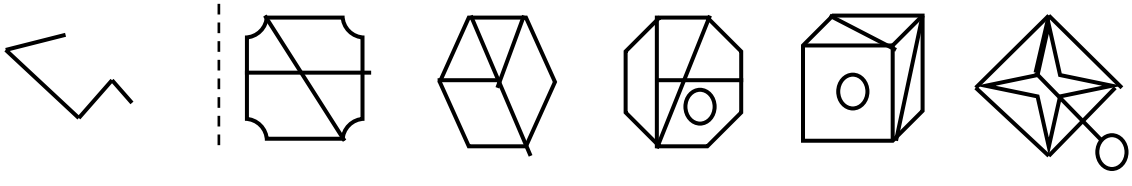
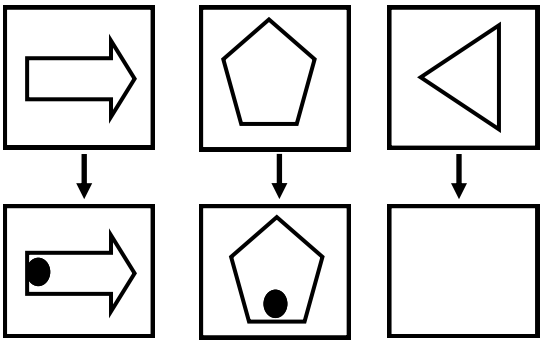


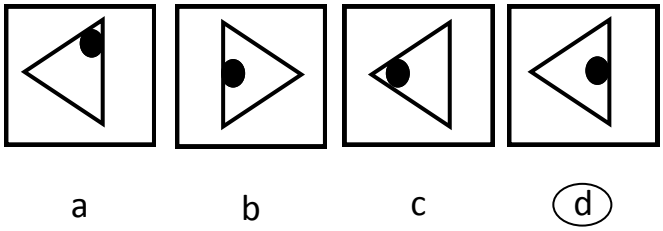
a b c d e

Attempts	No. of Corrections	Date	Sign
Attempt 1			
Attempt 2			

PAIR ANALOGY

EXAMPLE





Explanation: the figures on the top and bottom are the same and are facing in the same direction. One shaded circle has been added to the figure on the bottom, touching the bottom side of the shape. Therefore, the answer figure must follow the same pattern.

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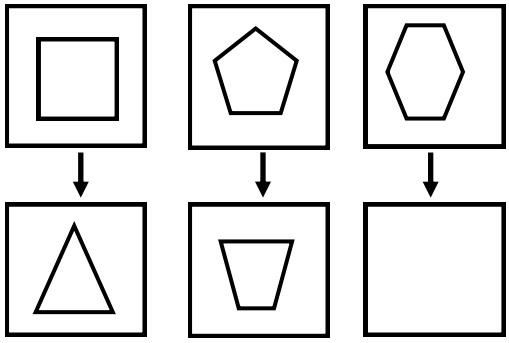

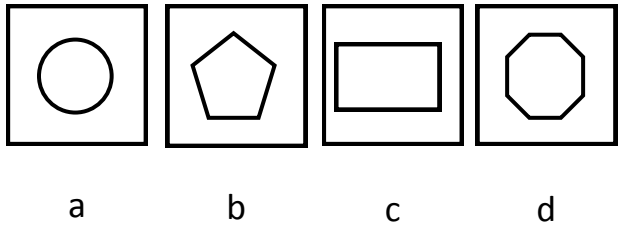

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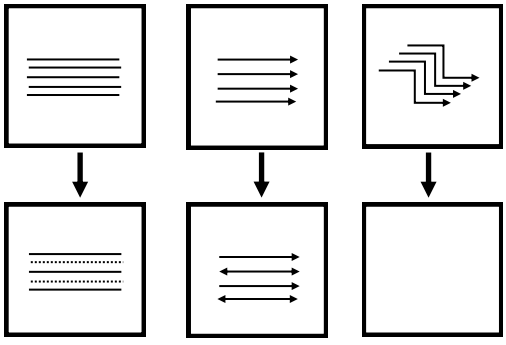

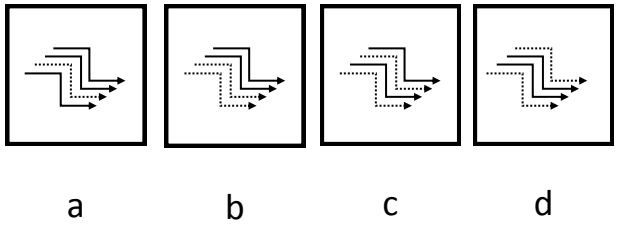

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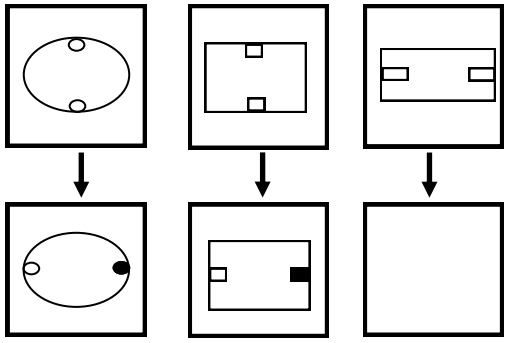

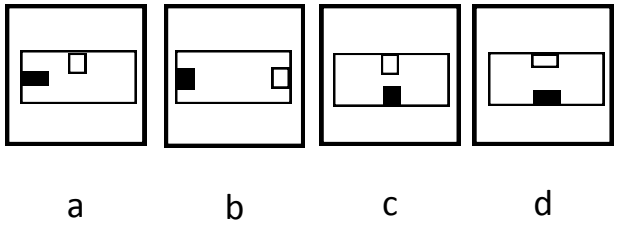

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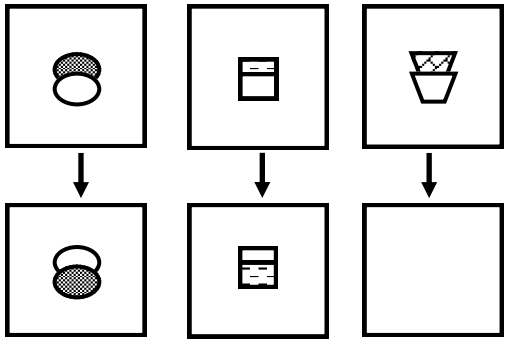

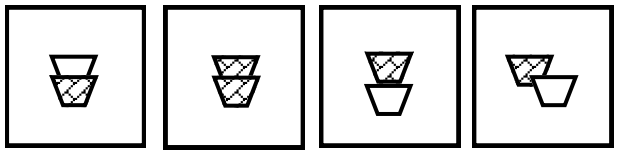

a b c d

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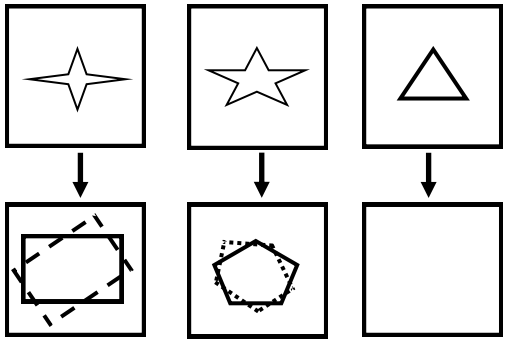

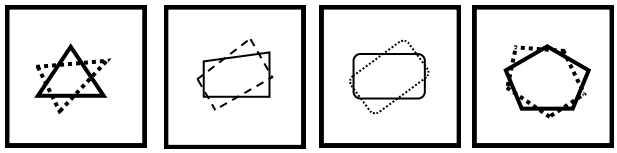

a b c d

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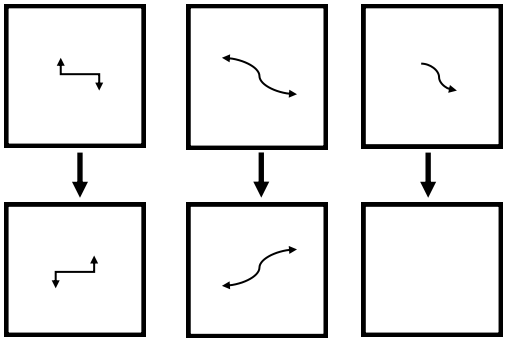

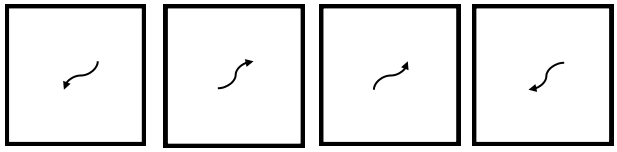

a b c d

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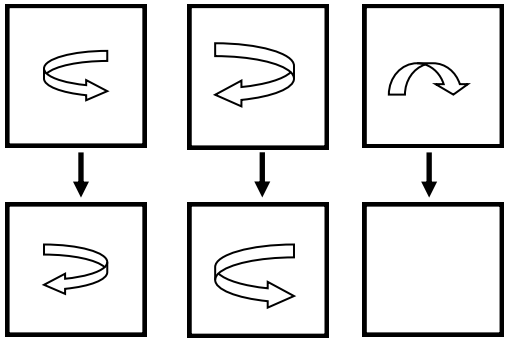

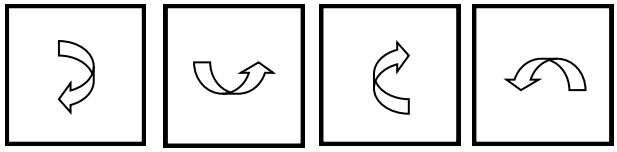

a b c d

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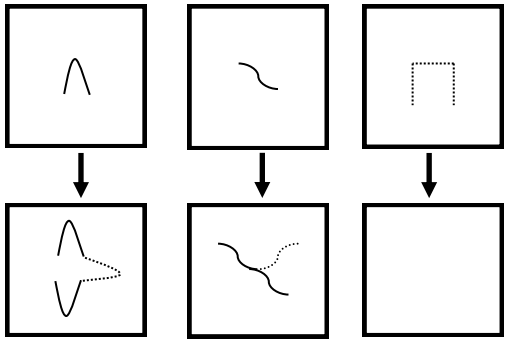

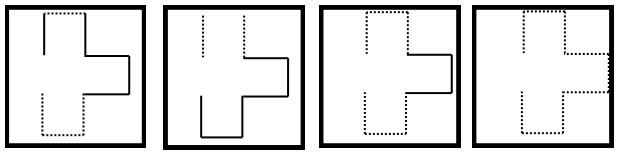

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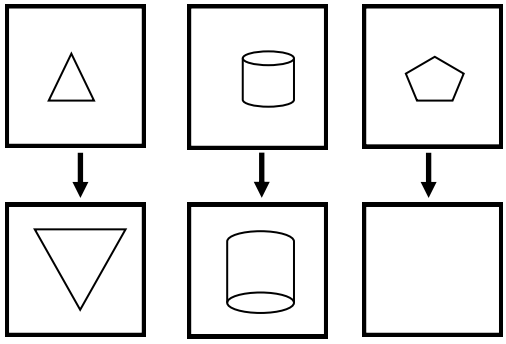

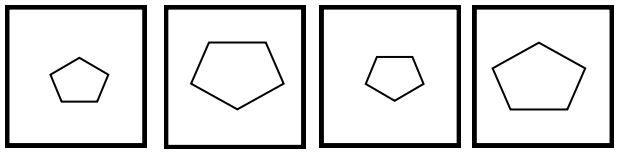

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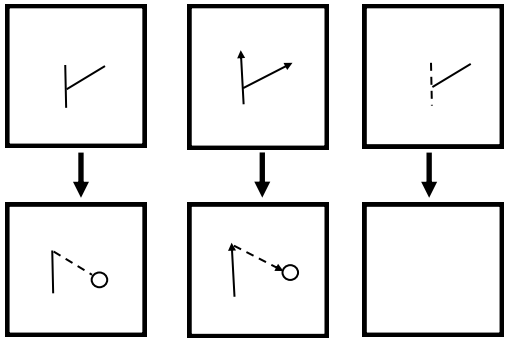

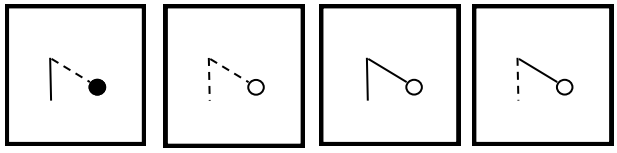

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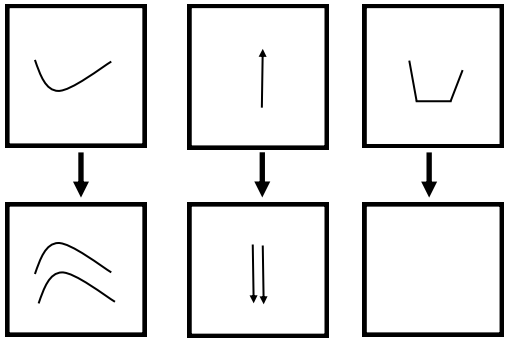

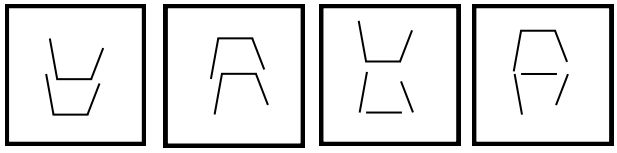

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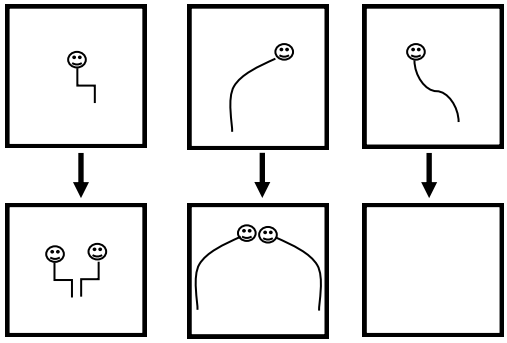

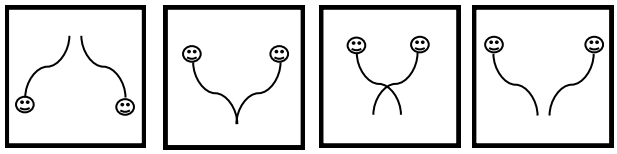

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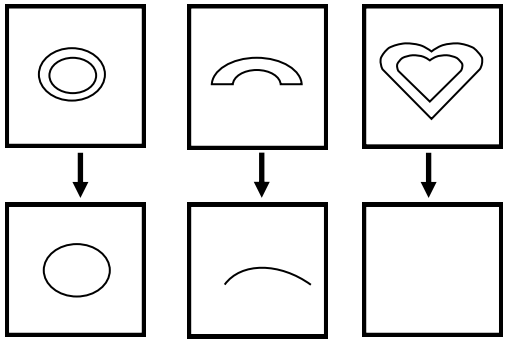

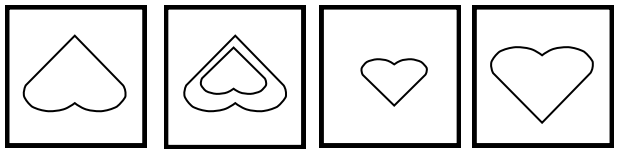

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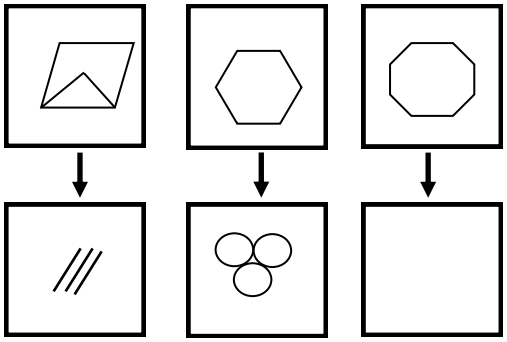

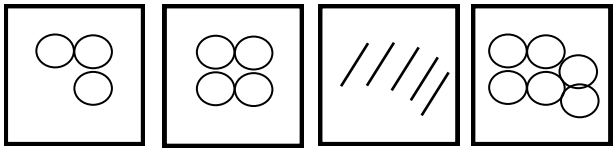

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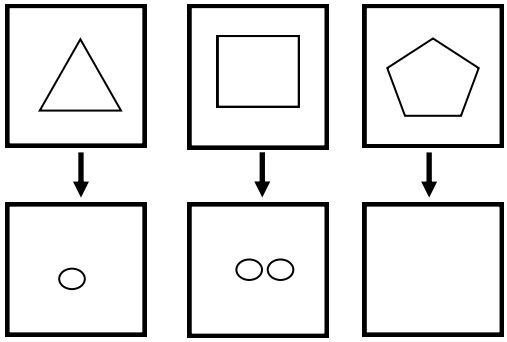

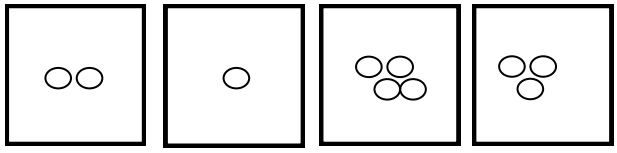

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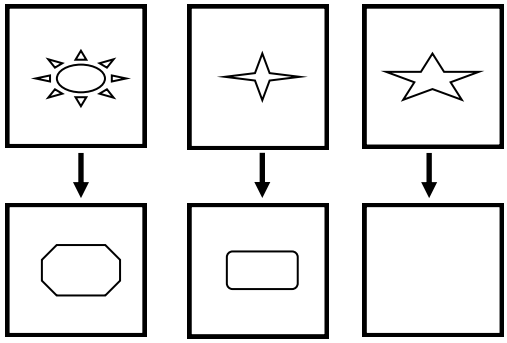

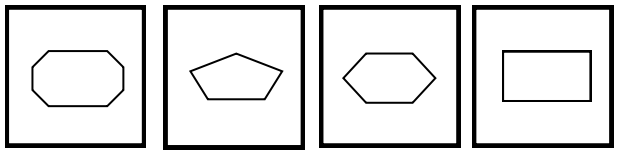

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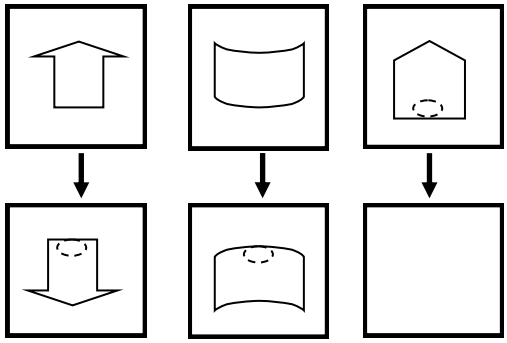

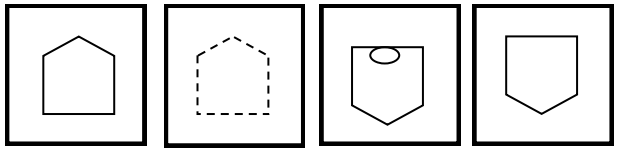

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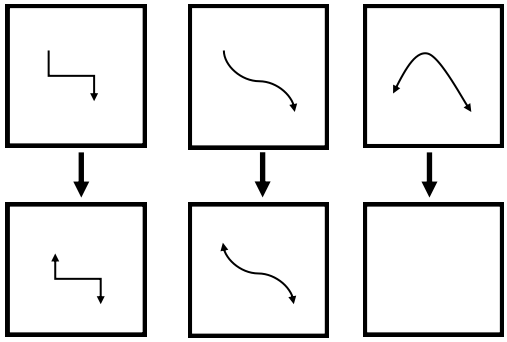

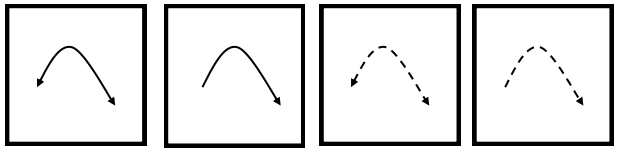

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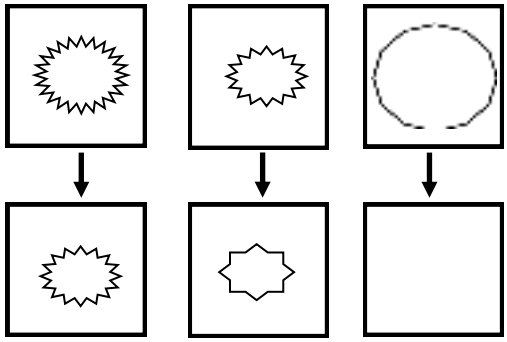

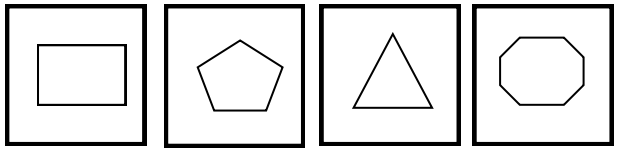

a b c d

Attempts	No. of Corrections	Date	Sign
Attempt 1			
Attempt 2			

OUR PUBLICATIONS (LEC)

NO	Year Group	NAME	STATUS	AUTHOR
1	2	English Classwork Book	Published	R. Myra
2	2	English Homework Book	Published	R. Myra
3	3	Mathematics Classwork Book	Published	M. Nat
4	3	Mathematics Homework Book	Published	M. Nat
5	3	English Book 1	Published	J. Suki
6	3	English Book 2	Published	J. Suki
7	4	Mathematics Classwork Book	Published	M. Nat
8	4	Mathematics Homework Book	Published	M. Nat
9	4	Verbal Reasoning Book 1	Published	M. Nat
10	4	Non-Verbal Reasoning	Published	M. Nat
11	5	Mathematics Book 1	Published	M. Nat
12	5	Mathematics Book 2	Published	M. Nat
13	5	Mathematics Book 3	Published	M. Nat
14	5	Mathematics Book 4	Published	M. Nat
15	5	Mathematics Book 5	Published	M. Nat
16	5	Verbal Reasoning Book 1	Published	M. Nat
17	5	Verbal Reasoning Book 2	Published	M. Nat
18	5	Verbal Reasoning GLS Book	Published	M. Nat
19	5	Comprehension Book 1	Published	R. Myra
20	5	Non Verbal Reasoning Book 1	Published	M. Nat
21	5	Non Verbal Reasoning Book 2	Published	M. Nat
22	6	Mathematics Classwork Book	Published	M. Nat
23	6	Mathematics Arithmetic Book	Published	M. Nat
24	6	Maths Practice Paper Book	Published	M. Nat
25	7	Mathematics Book 1	Published	M. Nat
26	7	Mathematics Book 2	Published	M. Nat
27	8	Mathematics Book 1	Published	M. Nat
28	8	Mathematics Book 2	Published	M. Nat
29	9	Mathematics Book 1	Published	M. Nat
30	9	Mathematics Book 2	Published	M. Nat
31	10	Mathematics Practice Book	Published	M. Nat
32	11	Mathematics Book 1	Published	M. Nat
33	11	Mathematics Book 2	Published	M. Nat

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11+

Verbal Reasoning (CEM Style), Non Verbal reasoning (CEM style & GLS)

Mathematical Reasoning and English

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