NON VERBAL REASONING

Practice Exercises

year 4

Ages 9-10

M. Nat

Practice Makes Perfect

Success at your fingertips

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Editor:

M.Nat

Contributors & Proofreading

Abinayan. B

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M.Nat BSc, BEd, P.G.C.E Diploma in computer programming, Diploma in supervisory Management

Designed by LEC direct, R. Nat , Hayes

NON VERBAL REASONING

WITH CEM STYLE QUESTIONS

Practice questions

Year 4

M.Nat

Contents

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 which they are going to have in year 5. 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.
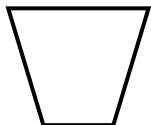
Please note we are not associated with CEM or The University of Durham in any way. CEM is the trademark for the Centre for Evaluation and Monitoring.
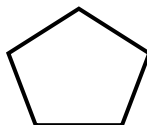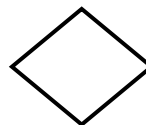
ODD ONE OUT

E.G.

| a | b | c | d | e |

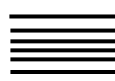Explanation: Every other picture has 4 sides, but **d** has 5 sides.

1)

| a | b | c | d | e |

Explanation:
....
....
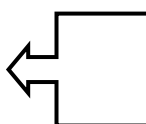
2)

| a | b | c | d | e |

Explanation:
....
....

3)

| a | b | c | d | e |

Explanation:
....
....

4)

| 2 | 6 | 7 | 4 | 8 |
| a | b | c | d | e |

Explanation:
....
....

5)

a	b	c	d	e

6)

a	b	c	d	e

7)

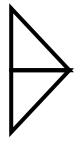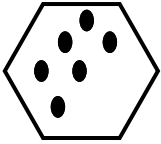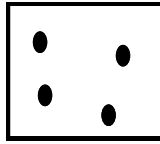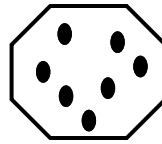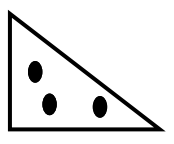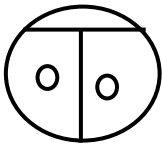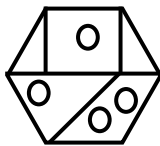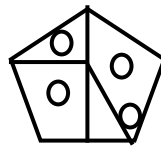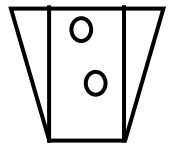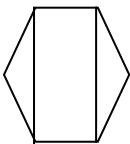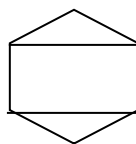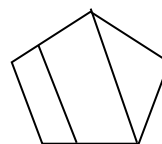|				
a	b	c	d	e

8)

a	b	c	d	e

9)

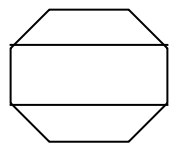a   b   c   d   e

Explanation:

....

....

10)

a   b   c   d   e

Explanation:

....

....

11)

a   b   c   d   e
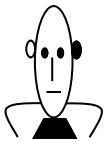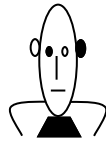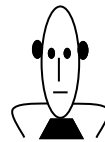
Explanation:

....

....

12)

a   b   c   d   e

Explanation:

....

....
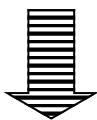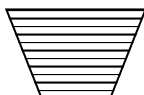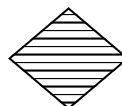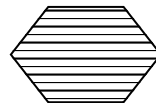
13)

a b c d e
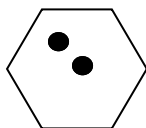
Explanation:
....
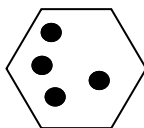..

14)

a b c d e

Explanation:
....
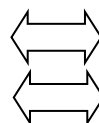..

15)

a b c d e

Explanation:
....
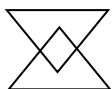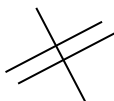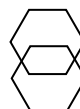..

16)

a b c d e

Explanation:
....
....

6

17)

a   b   c   d   e
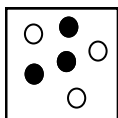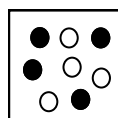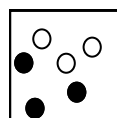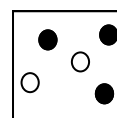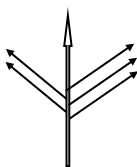
Explanation:

....

....
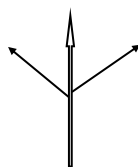
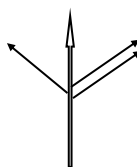18)

a   b   c   d   e

Explanation:

....

....

19)

a   b   c   d   e

Explanation:

....

....

20)

a   b   c   d   e

Explanation:

....

....

Attempts	No. of Corrections	Date	Sign
Attempt 1			
Attempt 2			

SERIES

Which comes next?

E.G.
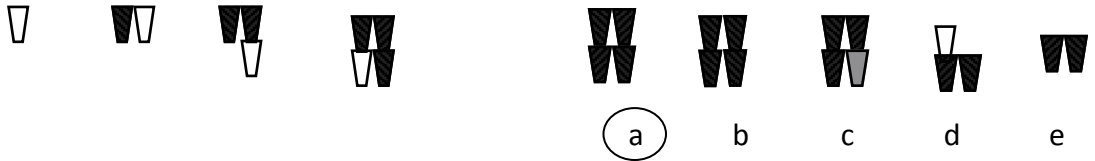
             (a)   b   c   d   e
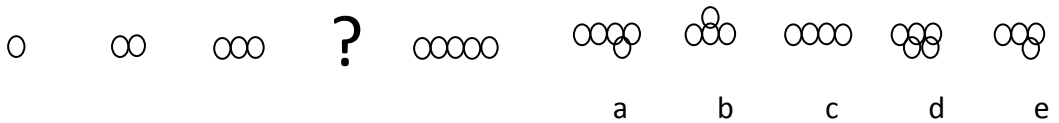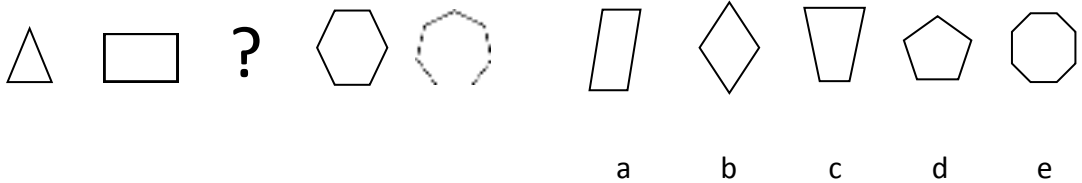
Explanation:

The number of shaded ones are increasing, while the number of unshaded ones stay the same.
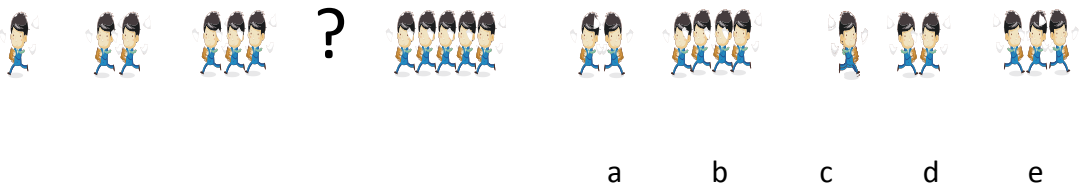
1)

          a   b   c   d   e
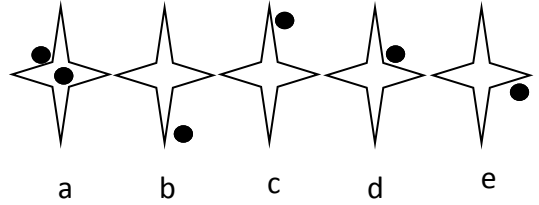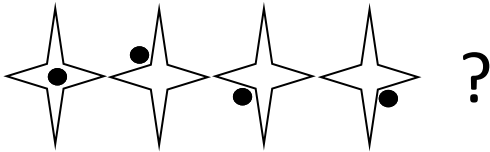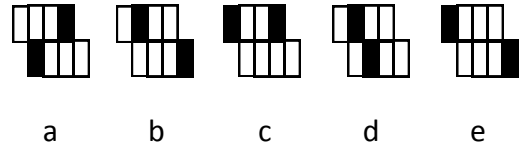
Explanation:

....

....

2)

          a   b   c   d   e

Explanation:

....

....

3)

          a   b   c   d   e

Explanation:

....

....

4)

Explanation:
....
....

5)

Explanation:
....
....

6)

a   b   c   d   e

Explanation:
....
....

7)

a   b   c   d   e

Explanation:
....
....

8)

a   b   c   d   e

Explanation:
....
....

9

9)

a   b   c   d   e

Explanation:
....
....

10)

a   b   c   d   e

Explanation:
....
....

11)

a   b   c   d   e

Explanation:
....
....

12)

a   b   c   d   e

Explanation:
....
....

13)

| | | | | |
|a|b|c|d|e|

Explanation:
....
....

14)

| | | | | |
|a|b|c|d|e|

Explanation:
....
....

15)

| | | | | |
|a|b|c|d|e|

Explanation:
....
....

16)

| | | | | |
|a|b|c|d|e|

Explanation:
....
....

11

17)

a   b   c   d   e

Explanation:
....
....

18)

| ‖| ‖‖ ? ‖‖‖‖

| ‖‖‖ ‖‖ ‖‖‖ ‖‖‖‖

a   b   c   d   e

Explanation:
....
....

19)

?

a   b   c   d   e

Explanation:
....
....

20)

?
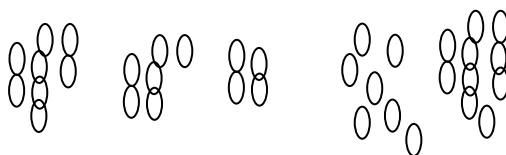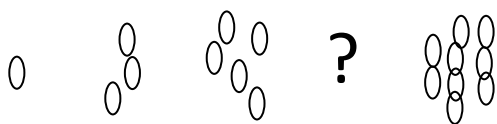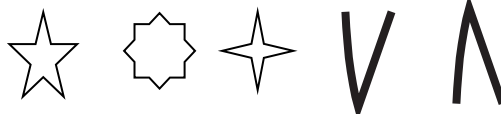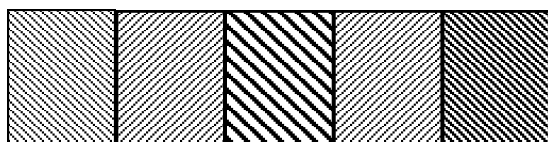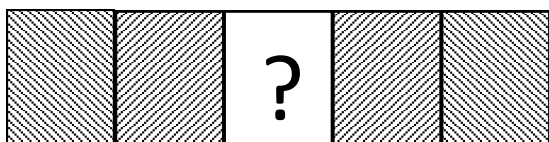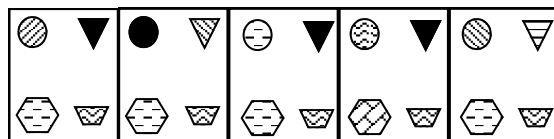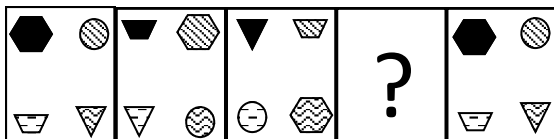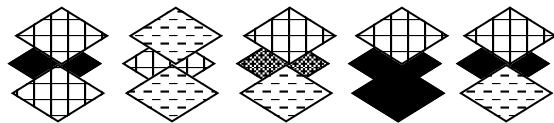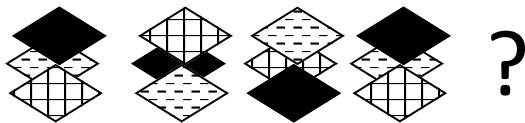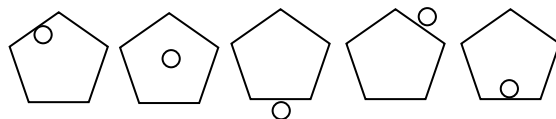
a   b   c   d   e
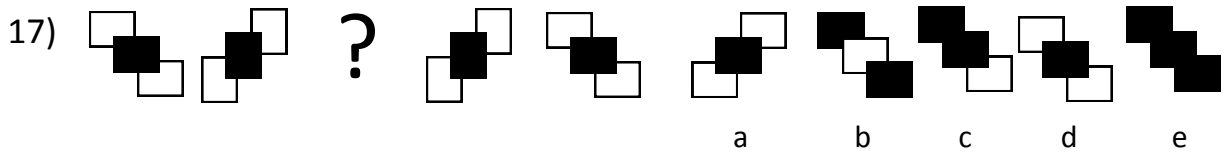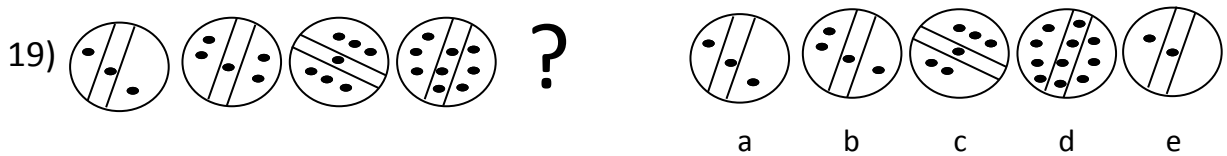
Explanation:
....
....

Attempts	No. of Corrections	Date	Sign
Attempt 1			
Attempt 2			

CODES

E.G.

AB

The left code is about the number of sides on the shape

The right code is about the interior shading of the shape
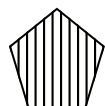
A means 4 sides | P means 5 sides | B means black shade | Q means upward stripes | S means brick shade
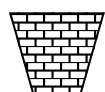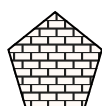
PQ

AS

AQ	AS	PS	BQ	BA
a	b	(c)	d	e

1)

PA

QA

PB

The left code is about ………………………………………………….

The right code is about ……………………………………………….

P means …………………..   Q means …………………..   B means …………………..

A means …………………..

PB	QB	AQ	AP	AB
a	b	c	d	e

2)

AP

BQ

CP

The left code is about ……………………………………………….

The right code is about ………………………………………………..

A means …………………..   B means …………………..   Q means …………………..

P means …………………..   C means …………………..

AP	BP	QC	AQ	QP
a	b	c	d	e

13

3)

 AP

 BQ

 CR
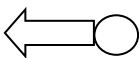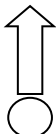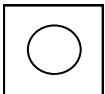
The left code is about ……………………………………………………..

The right code is about ……………………………………………………..
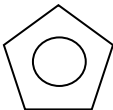
P means …………………   Q means …………………   B means …………………

A means …………………   C means …………………   R means …………………

	AB	PQ	AQ	AR	PB
	a	b	c	d	e

4)

 AP

 AQ

 BP

The left code is about ……………………………………………………..

The right code is about ……………………………………………………..

P means …………………   Q means …………………   B means …………………

A means …………………

	PB	QB	BP	BQ	PQ
	a	b	c	d	e

5)

 AP

 BP

 CQ

The left code is about ……………………………………………………..

The right code is about ……………………………………………………..

P means …………………   Q means …………………   A means …………………

B means …………………   C means …………………

	AQ	AC	PB	BQ	AB
	a	b	c	d	e

6)

 AQ

 BP

 CP

The left code is about ……………………………………………………..

The right code is about ……………………………………………………..

P means …………………   Q means …………………   B means …………………

C means …………………   A means …………………

	AP	AC	BQ	AB	QC
	a	b	c	d	e

14

7)

 AP

 BQ

 CR

The left code is about ………………………………………………….

The right code is about ………………………………………………..

P means …………………… Q means …………………… B means …………………..

R means ………………… A means ………………… C means …………………

AB	PQ	AQ	AR	PC
a	b	c	d	e

8)

 AP

 BQ

 CP

The left code is about ………………………………………………….

The right code is about …………………………………………………..

P means ………………….. Q means ………………….. B means ………………….

C means ………………… A means …………………

AQ	PB	CQ	PC	AP
a	b	c	d	e

9)

 APS

 BQT

 ARU

The left code is about ………………………………………………….
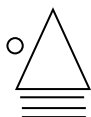
The right code is about …………………………………………………

P means ………………… Q means ………………… B means …………………..

A means ………………… R means ………………… S means …………………

T means ………………… U means …………………

AQU	PBR	STU	BRS	AQR
a	b	c	d	e

10)

 APZ

 BQY
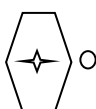
 CRZ

The left code is about ………………………………………………….

The right code is about …………………………………………………..

A means ………………….. Q means ………………….. X means …………………..
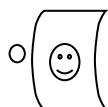
Y means ………………… C means ………………… B means …………………..

P means ………………… R means ………………… Z means …………………
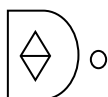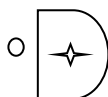
AQY	XYZ	AYR	CPY	XBZ
a	b	c	d	e

11)

BQ

AP

CR

The left code is about ....
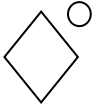
The right code is about ....

P means ....   Q means ....   A means ....
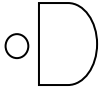
C means ....   B means ....   R means ....

AR	BR	BP	PQ	BC
a	b	c	d	e

12)
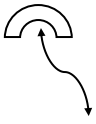
AP

BQ

AR

The left code is about ....

The right code is about ....

P means ....   Q means ....   A means ....

C means ....   B means ....   R means ....
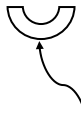
AQ	BR	PQ	BC	BP
a	b	c	d	e

13)

AB

CD

ED

The left code is about ....

The right code is about ....
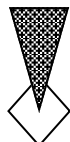
A means ....   B means ....   C means ....

D means ....   E means ....

AD	EB	CB	ED	AB
a	b	c	d	e

14)

 PQ

 RS

 PT

The left code is about ……………………………………………………

The right code is about ……………………………………………………

P means …………………   Q means …………………   R means …………………

S means …………………   T means …………………

RT	PQ	RS	RQ	PT
a	b	c	d	e

15)
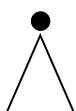
 AP

 AQ

 BR

The left code is about ……………………………………………………

The right code is about ……………………………………………………

P means …………………   Q means …………………   A means …………………
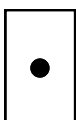
C means …………………   B means …………………   R means …………………
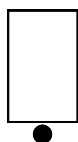
AQ	BR	BQ	BC	BP
a	b	c	d	e

16)

 AP

 BQ

 AR

The left code is about ……………………………………………………

The right code is about ……………………………………………………

P means …………………   Q means …………………   A means …………………

C means …………………   B means …………………

R means …………………

AQ	BR	PQ	BC	BP
a	b	c	d	e

17

17)

BQ

CP

CR

The left code is about …………………………………………………………

The right code is about …………………………………………………..

P means …………………   Q means …………………   C means …………………

R means …………………   B means …………………
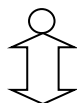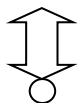
	AQ	BR	BP	PQ	BC
	a	b	c	d	e

18)
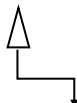
AP

AQ

BR

The left code is about …………………………………………………………

The right code is about …………………………………………………..

P means …………………   Q means …………………   A means …………………
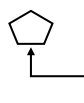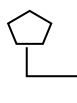
R means …………………   B means …………………

	AQ	AR	PQ	BC	BP
	a	b	c	d	e

19)

AP

BQ

AR

The left code is about …………………………………………………

The right code is about …………………………………………………..

P means …………………   Q means …………………   A means …………………

R means …………………   B means …………………

	AQ	BR	PQ	BC	BP
	a	b	c	d	e

20)

AP

BQ

BR

The left code is about …………………………………………………………

The right code is about …………………………………………………..

P means …………………   Q means …………………   A means …………………

R means…………………   B means …………………

	AQ	BR	PQ	BC	BP
	a	b	c	d	e

Attempts	No. of Corrections	Date	Sign
Attempt 1			
Attempt 2			

REFLECTION

E.G.

a   b   (c)   d   e

1)

a   b   c   d   e

2)

a   b   c   d   e

3)
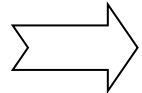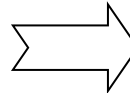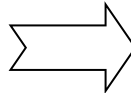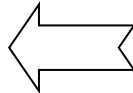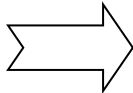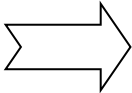
a   b   c   d   e

4)
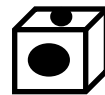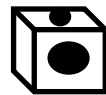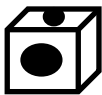
a   b   *c*   d   e

5)

a   b   c   d   e

6)

a b c d e

7)
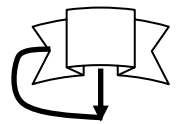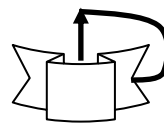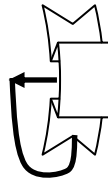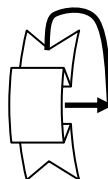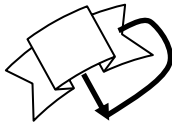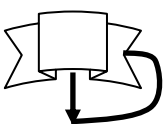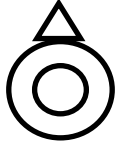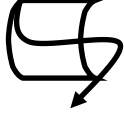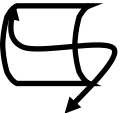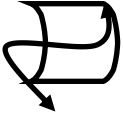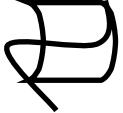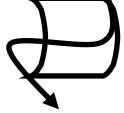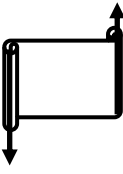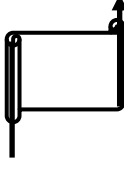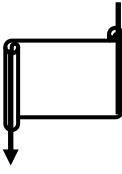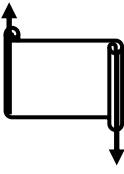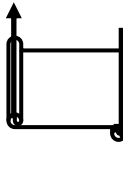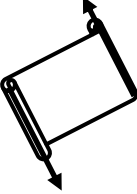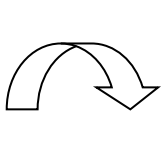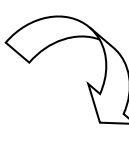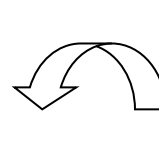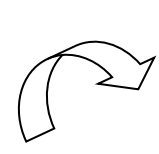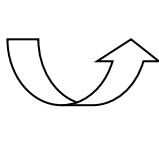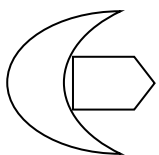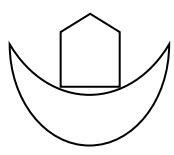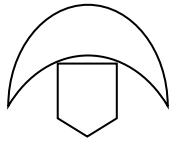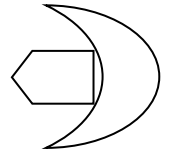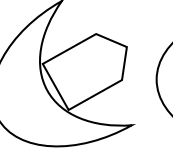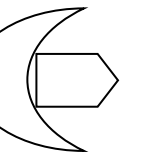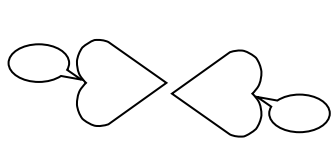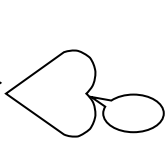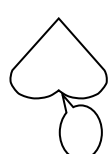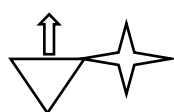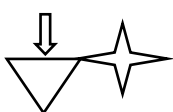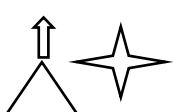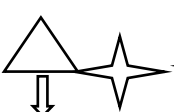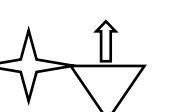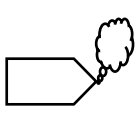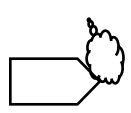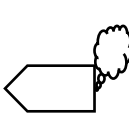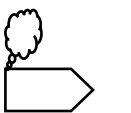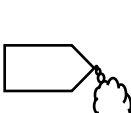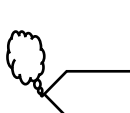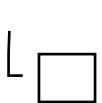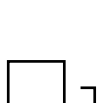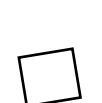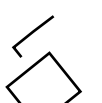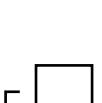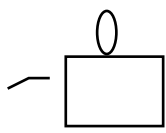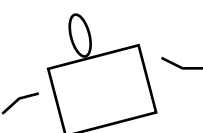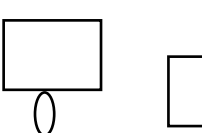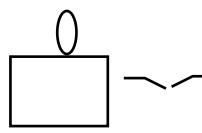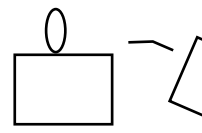
a b c d e

8)

a b *c* d e

9)

a b c d e

10

a b c d e

11

a b c d e

12

a b c d e

13)

a   b   c   d   e

14)

a   b   c   d   e

15)

a   b   c   d   e

16)

a   b   c   d   e

17)

a   b   c   d   e

18)

a   b   c   d   e

19)

a   b   c   d   e

Attempts	No. of Corrections	Date	Sign
Attempt 1			
Attempt 2			

SIMILARITY

Which has the similar character as the figures on your left?

E.G.

a   b   c   d   e
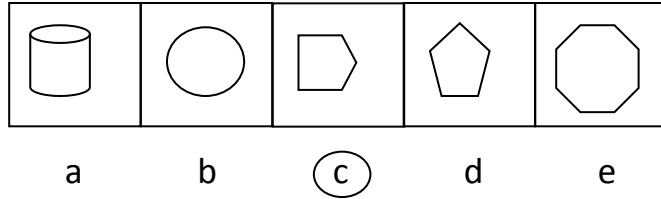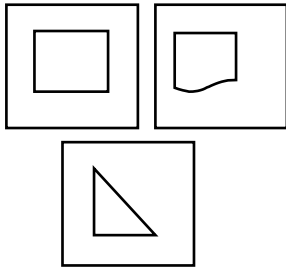
Explanation:

All the figures have a 90^0 angle
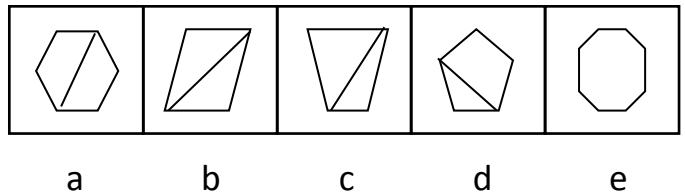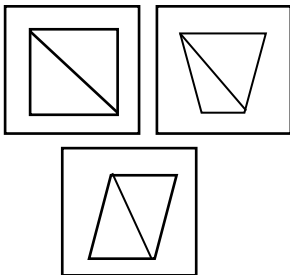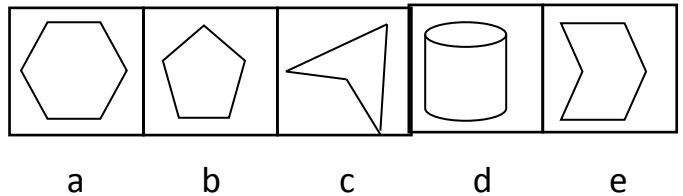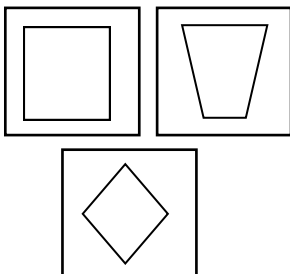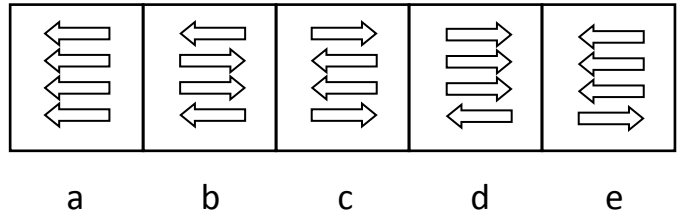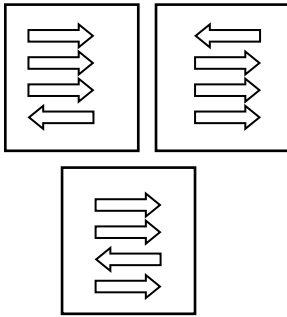
1)

a   b   c   d   e

Explanation:

....

....

2)

a   b   c   d   e

Explanation:

....

....

3)

a   b   c   d   e

Explanation:

....

....

4)

T	V

X

M	Y	D	K	L

a   b   c   d   e

Explanation:

....

....

5)

a   b   c   d   e

Explanation:

....

....

6)

a   b   c   d   e

Explanation:

....

....

7)

3	4	11	7	9
a	b	c	d	e

Explanation:
....
....

8)

a	b	c	d	e

Explanation:
....
....

9)

a	b	c	d	e
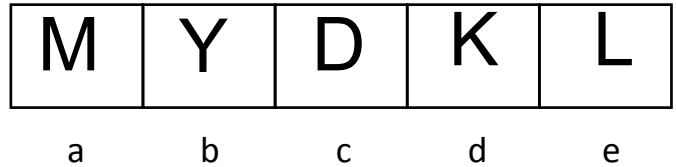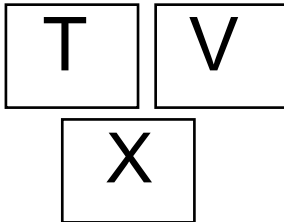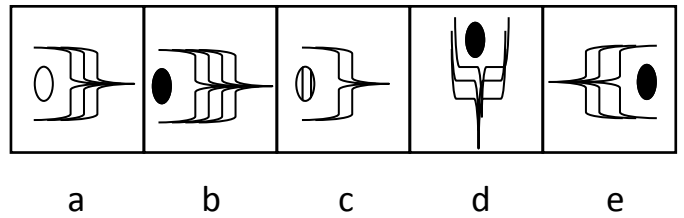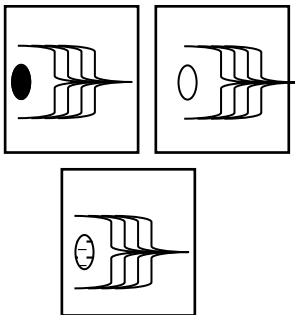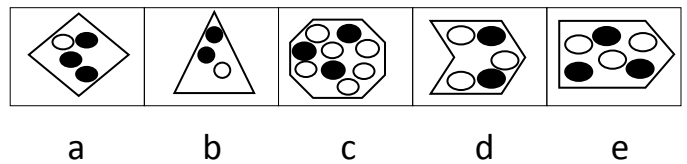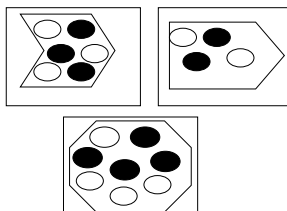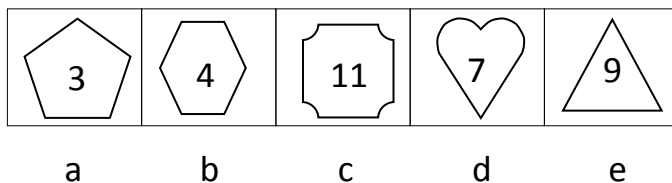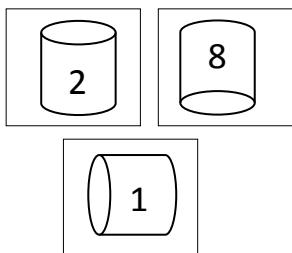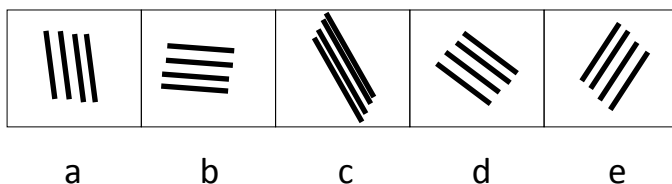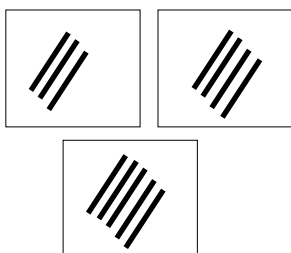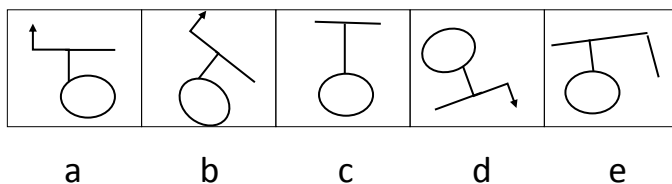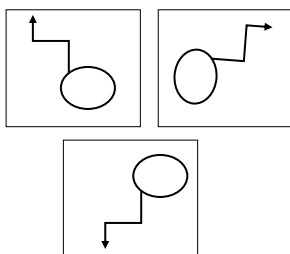
Explanation:
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10)
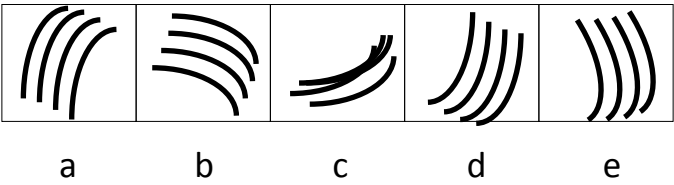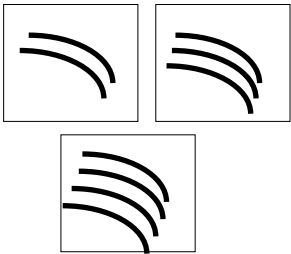
Explanation:
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11)
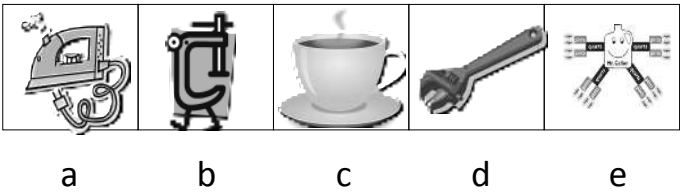
Explanation:
....
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12)
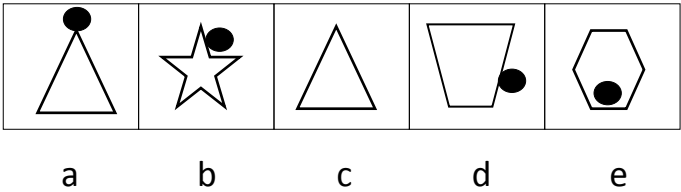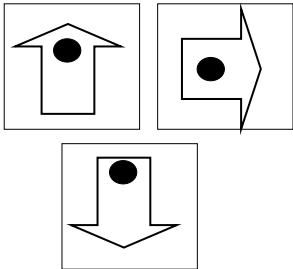
Explanation:
....
....

13)
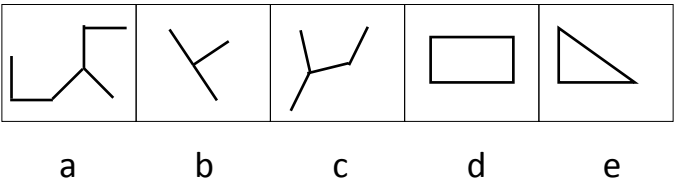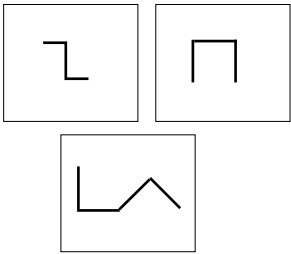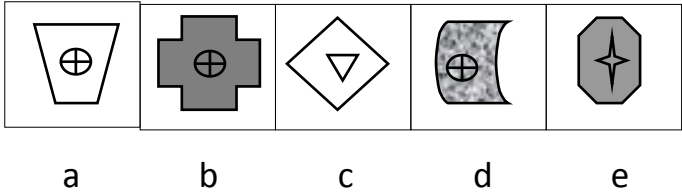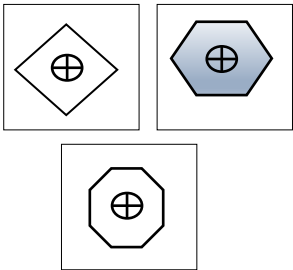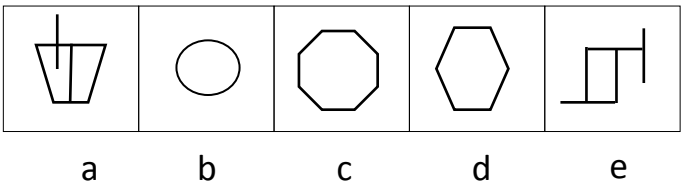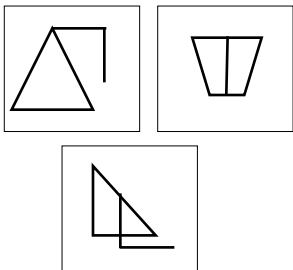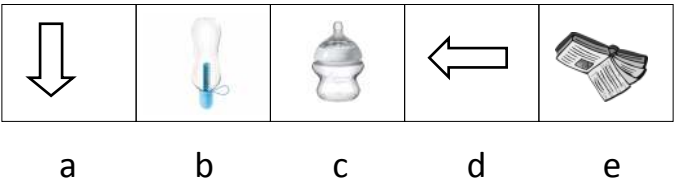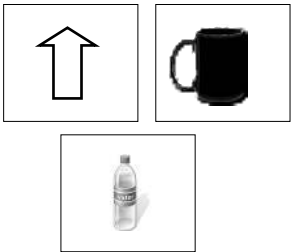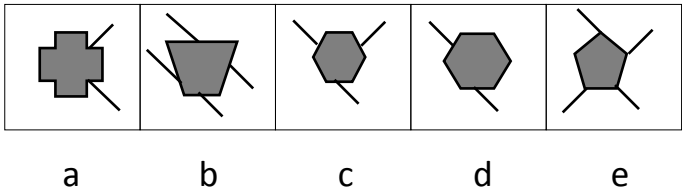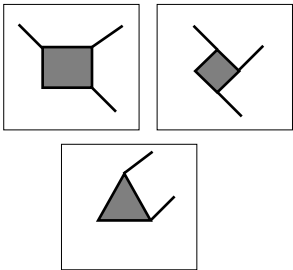
a   b   c   d   e

Explanation:

....

....

14)

a   b   c   d   e

Explanation:

....

....

15)

a   b   c   d   e

Explanation:

....

....

16)

	a	b	c	d	e

Explanation:

....

....

17)

	a	b	c	d	e

Explanation:

....

....

18)

	a	b	c	d	e

Explanation:

....

....

19)

a	b	c	d	e

Explanation:

....

....

20)

a	b	c	d	e

Explanation:

....

....
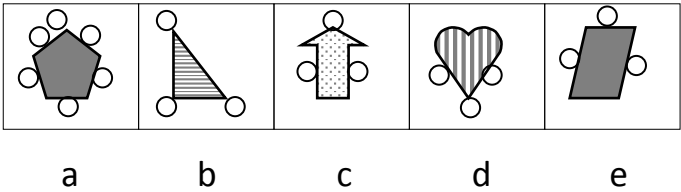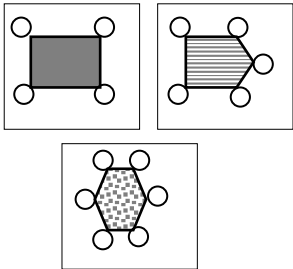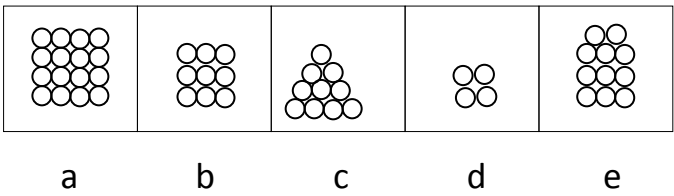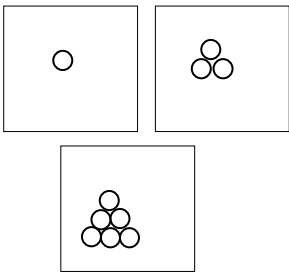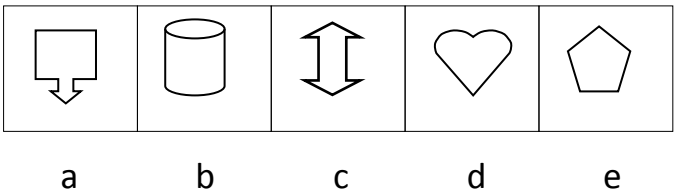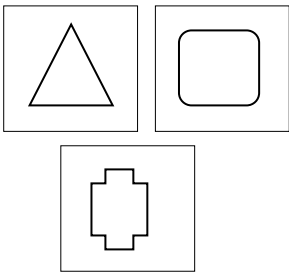
Attempts	No. of Corrections	Date	Sign
Attempt 1			
Attempt 2			

ROTATION

Rotate the original shape by 90^0 clockwise

E.G.

a   b   c   d   e
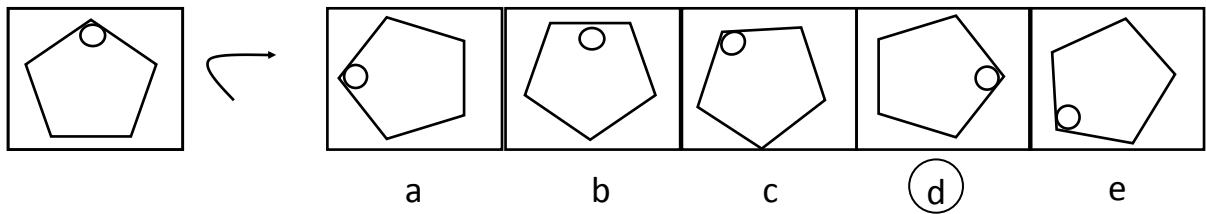
Explanation:

Shape a rotates by 90^0 in the direction of anti clockwise. Shape b rotated by 180^0 but not the circle. Shape c rotates by 45^0 with the circle . Shape d rotates by 90^0 clockwise. Shape e rotated by 15^0 in clockwise.

1)

a   b   c   d   e

Explanation:
....
....

2)

a   b   c   d   e

Explanation:
....
....

29

3)
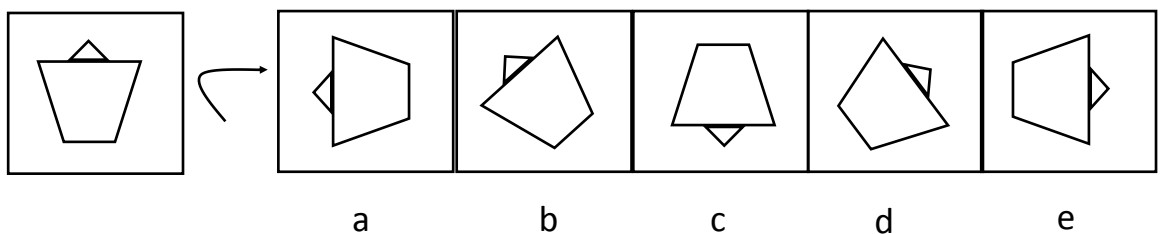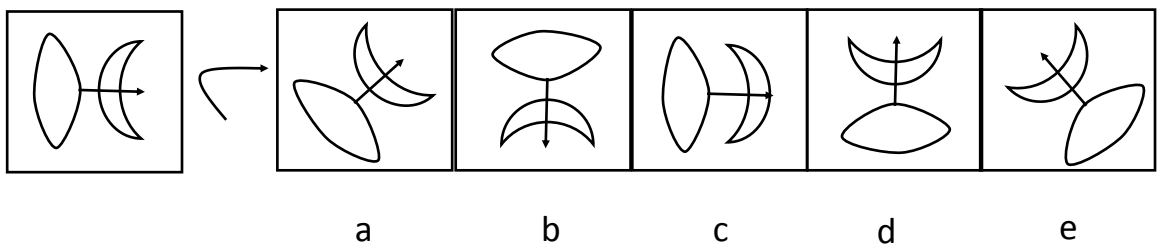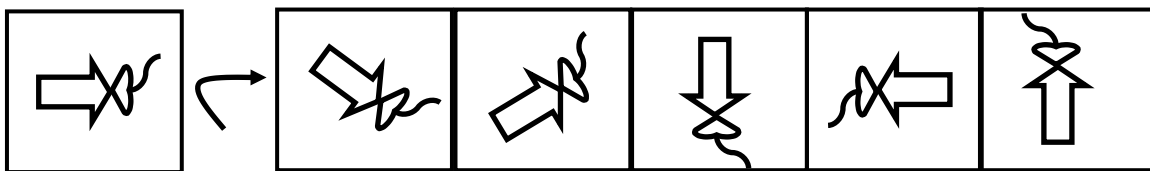
| | a | b | c | d | e |

Explanation:
....
....

4)

| | a | b | c | d | e |

Explanation:
....
...
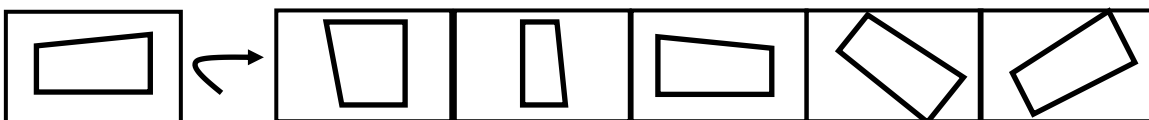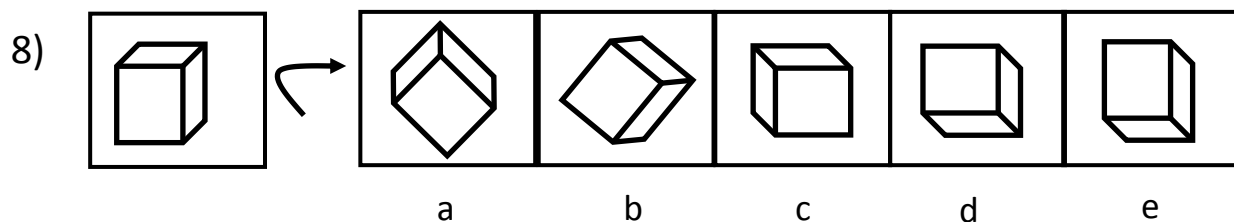
5)

| | a | b | c | d | e |

Explanation:
....
....

6)

| | a | b | c | d | e |

Explanation:
....
....

7)

| | a | b | c | d | e |

Explanation:
....
....

8)

| | a | b | c | d | e |

Explanation:
....
....

9)

| | a | b | c | d | e |

Explanation:
....
....

10)

| | a | b | c | d | e |

Explanation:
....
....

11)

| | a | b | c | d | e |

Explanation:
....
....

12)

| | a | b | c | d | e |

Explanation:
....
....

13)

| a | b | c | d | e |

14)

| a | b | c | d | e |

15)

| a | b | c | d | e |

16)

| a | b | c | d | e |

17)

| a | b | c | d | e |

18)

	a	b	c	d	e

Explanation:

....

....

19)

	a	b	c	d	e

Explanation:

....

....

20)

	a	b	c	d	e

Explanation:

....

....
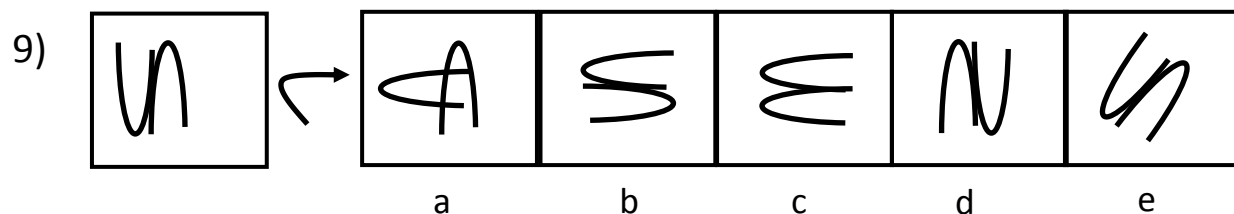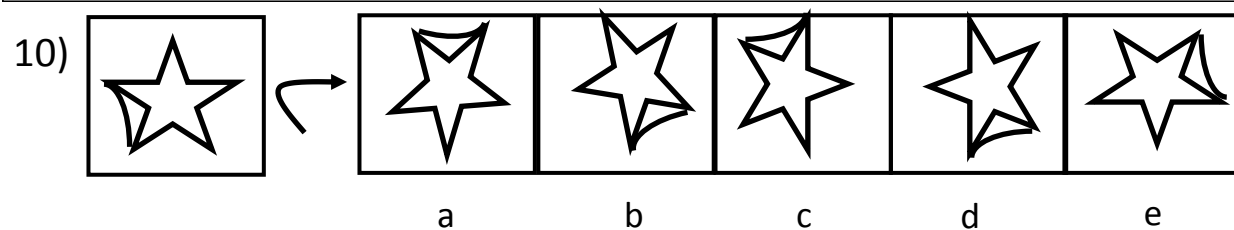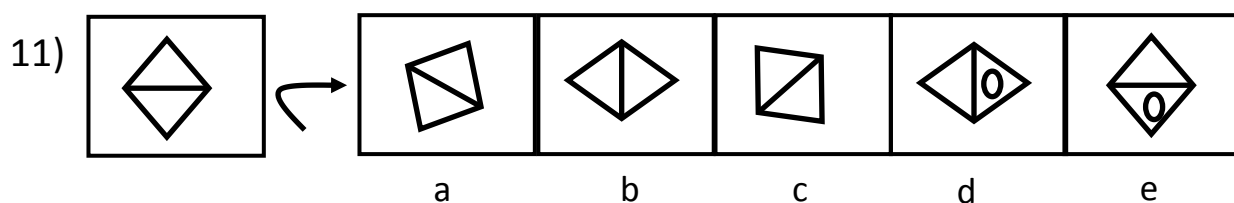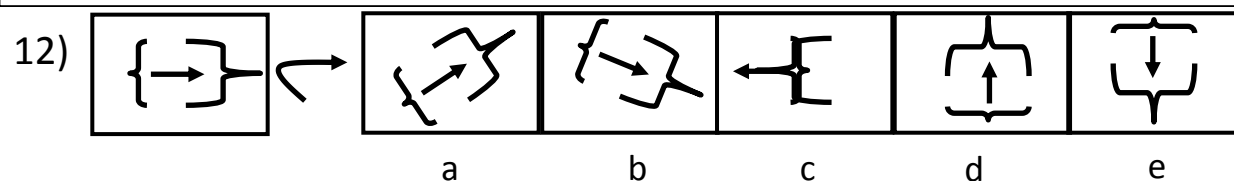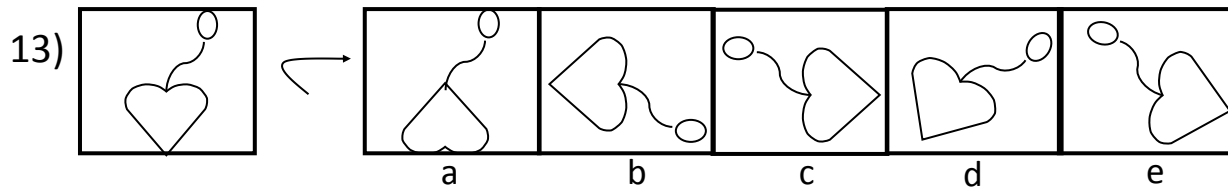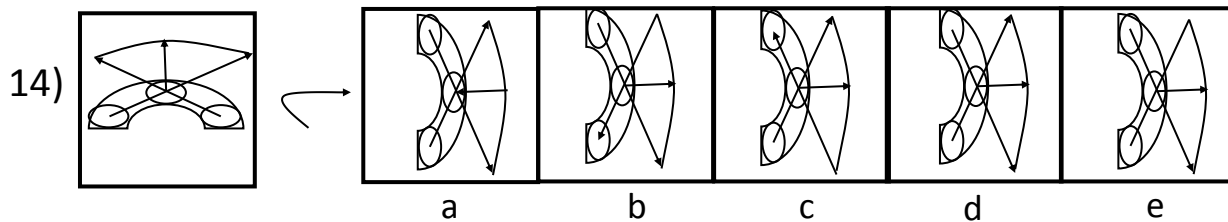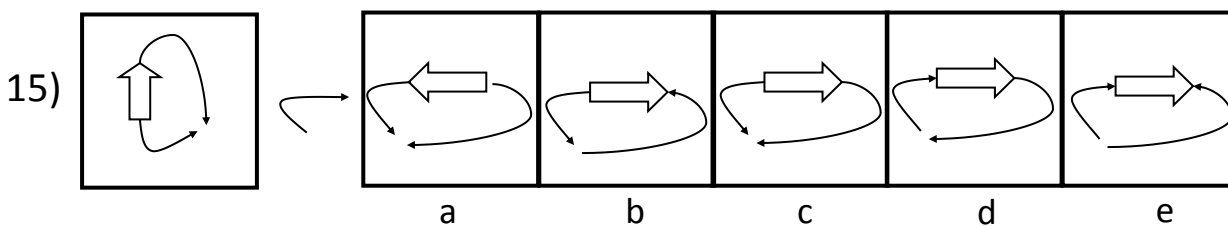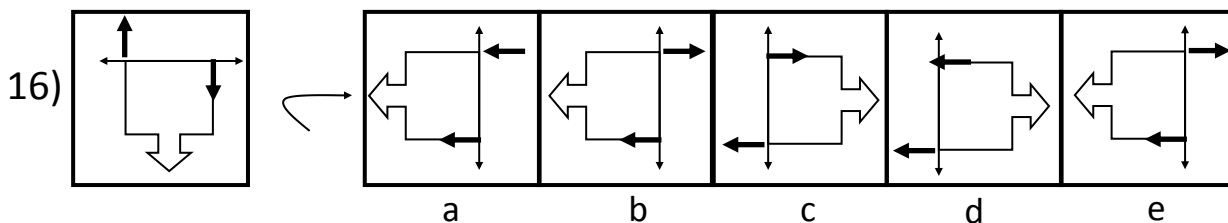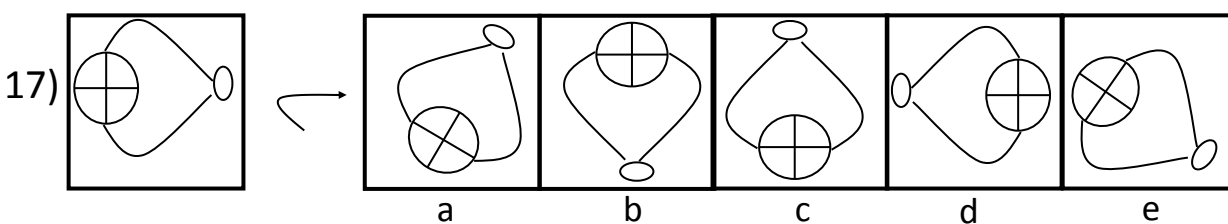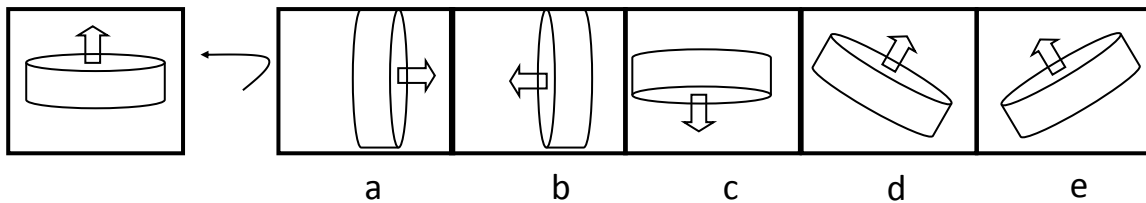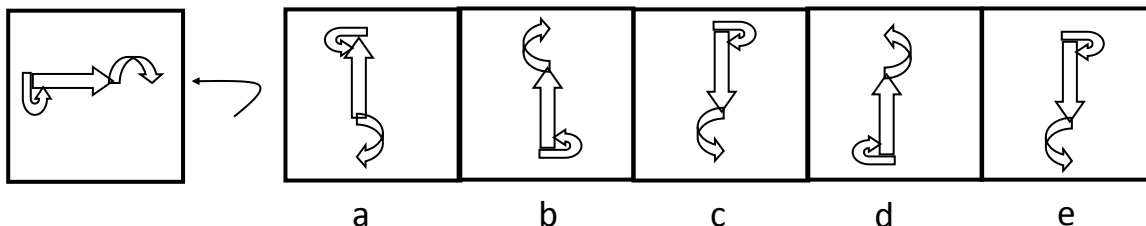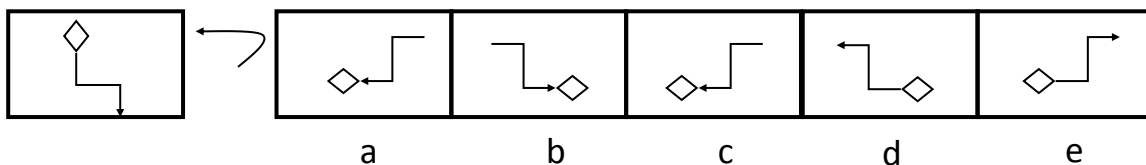
Attempts	No. of Corrections	Date	Sign
Attempt 1			
Attempt 2			

MATRIX

Find the figure which fits into the empty square.

E.G.
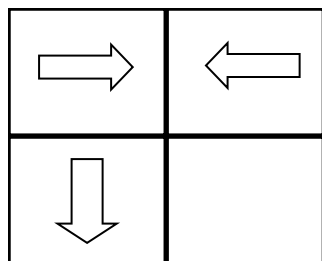
Explanation: The arrows in the first two squares are face to face.

a   b   c   d   e

1)

Explanation:
....

a   b   c   d   e

2)

Explanation:
....

a   b   c   d   e

3)

Explanation:
....

a   b   c   d   e

4)
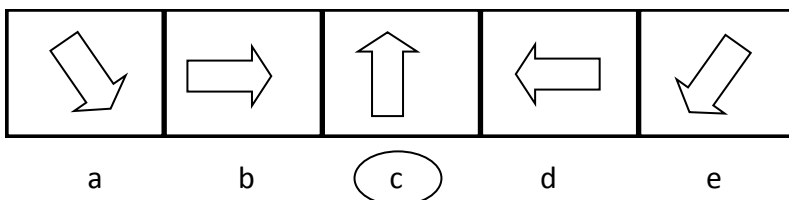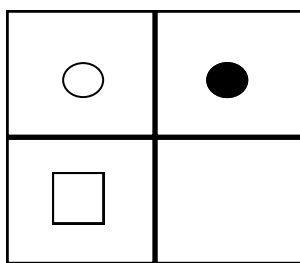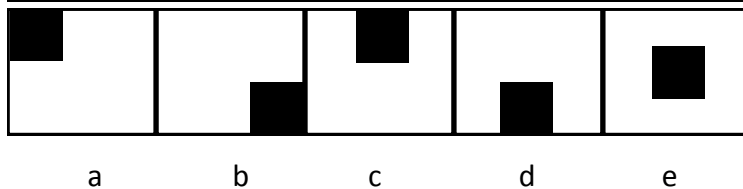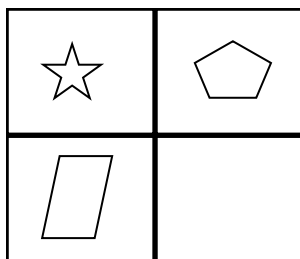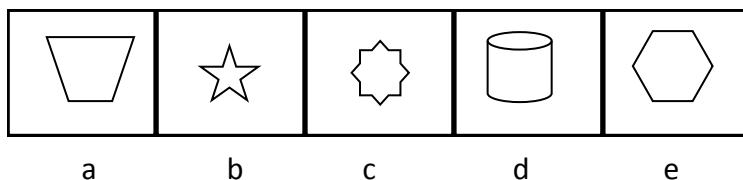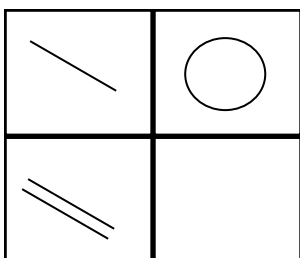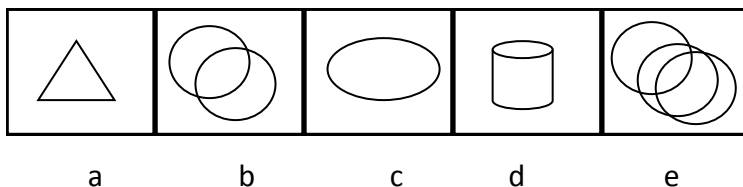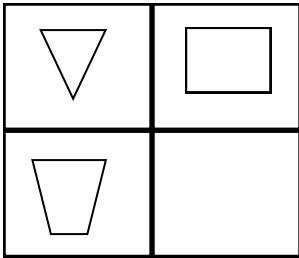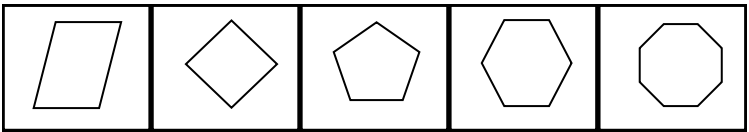
Explanation:
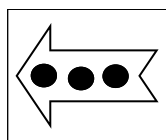..

| a | b | c | d | e |

5)
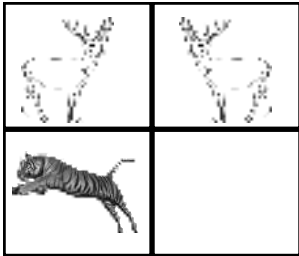
Explanation:
....

| a | b | c | d | e |

6)
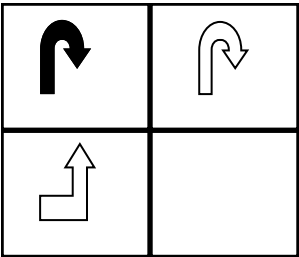
Explanation:
....
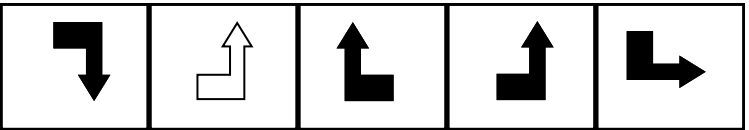
| a | b | c | d | e |

7)
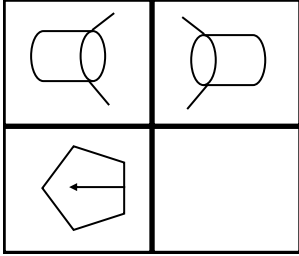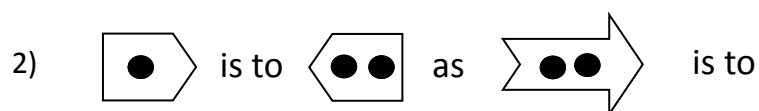
Explanation:
....
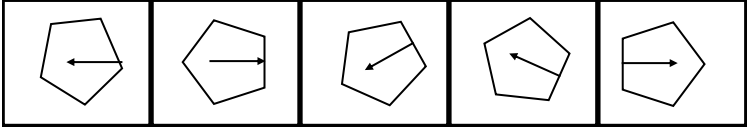
| a | b | c | d | e |

8)
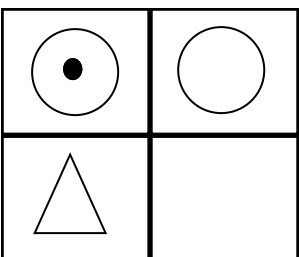
Explanation:
....

| a | b | c | d | e |
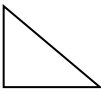
9)
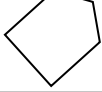
Explanation:
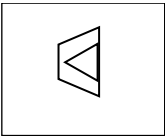..

| a | b | c | d | e |
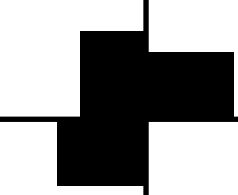
10)

Explanation:
....

| a | b | c | d | e |

11)
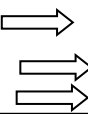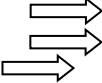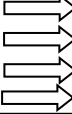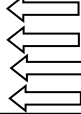
Explanation:
....

| a | b | c | d | e |
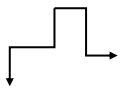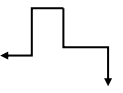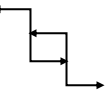
12)
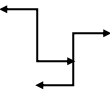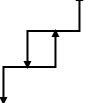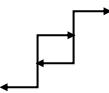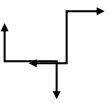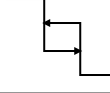
Explanation:
....

| a | b | c | d | e |

13)

Explanation:
....

| a | b | c | d | e |

14)

Explanation:

....

a   b   c   d   e

15)
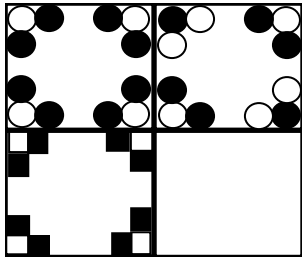
Explanation:

....
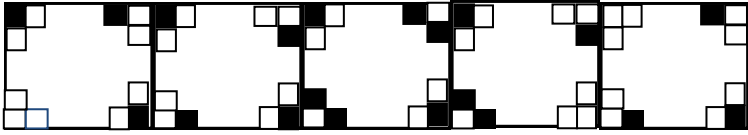
a   b   c   d   e

Attempts	No. of Corrections	Date	Sign
Attempt 1			
Attempt 2			

ANALOGY

Which picture completes the second pair in the same way as the first pair?

E.G.
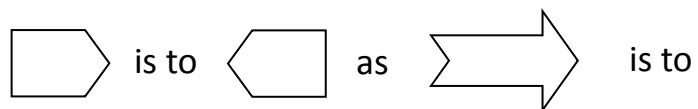
is to ___ as ___ is to

> First two figures are face to face. Therefore the other one must also be like that.
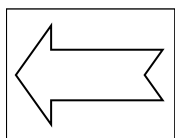
a b c d e
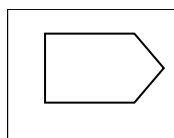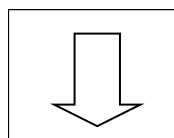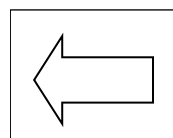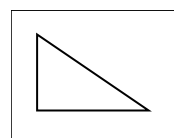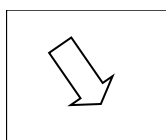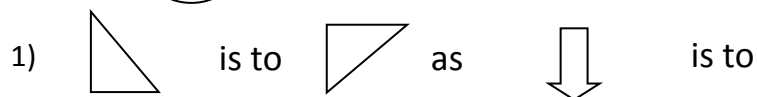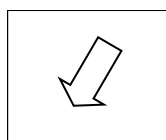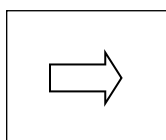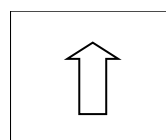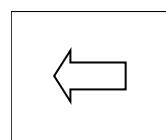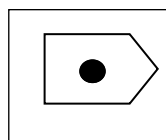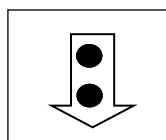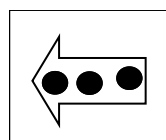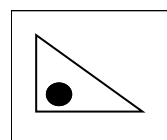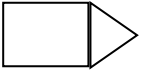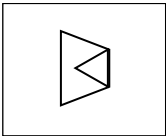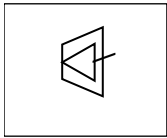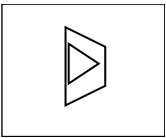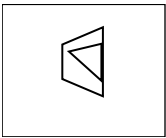
1) ___ is to ___ as ___ is to

a b c d e

Explanation:
....
....

2) ___ is to ___ as ___ is to

a b c d e

Explanation:
....
....

3) [rectangle with triangle point] is to [square with right-pointing triangle] as [left-pointing triangle outline] is to

a   b   c   d   e

Explanation:
....
....

4) [pentagon] is to [dashed pentagon with circle] as [triangle] is to

a   b   c   d   e

Explanation:
....
....

5) [diamond, filled square] is to [square, filled diamond] as [filled triangle, circle] is to
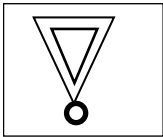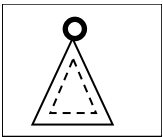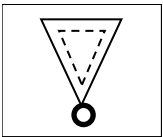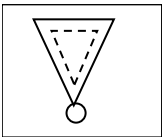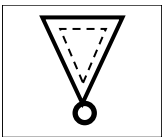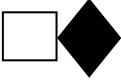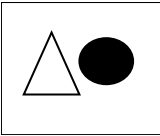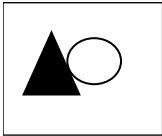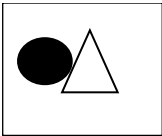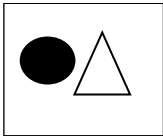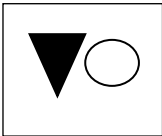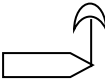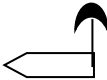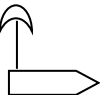
a   b   c   d   e

Explanation:
....
....
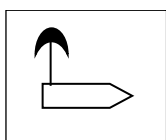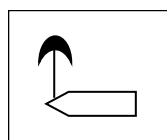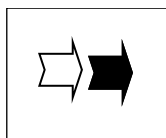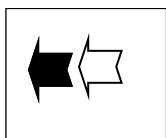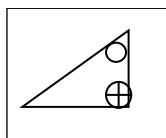
6) is to as is to
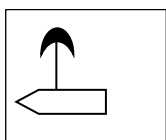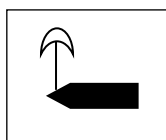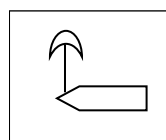
a   b   c   d   e

Explanation:
....
....
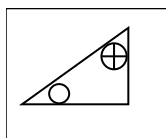
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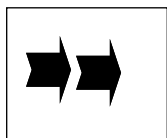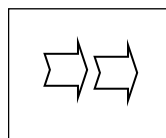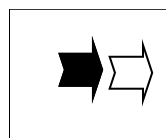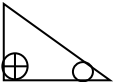
a   b   c   d   e

Explanation:
....
....
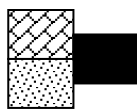
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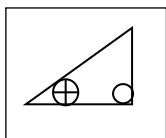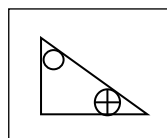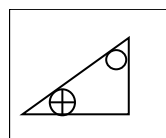
a   b   c   d   e

Explanation:
....
....
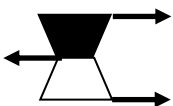
9) is to as is to
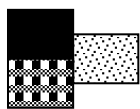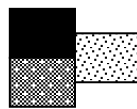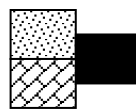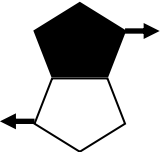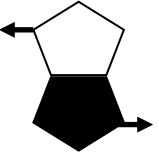
a   b   c   d   e

Explanation:
....
....

10) is to as is to
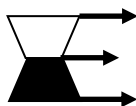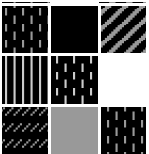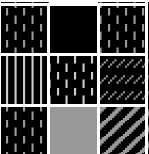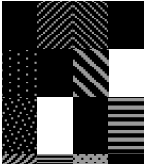
a   b   c   d   e

Explanation:
....
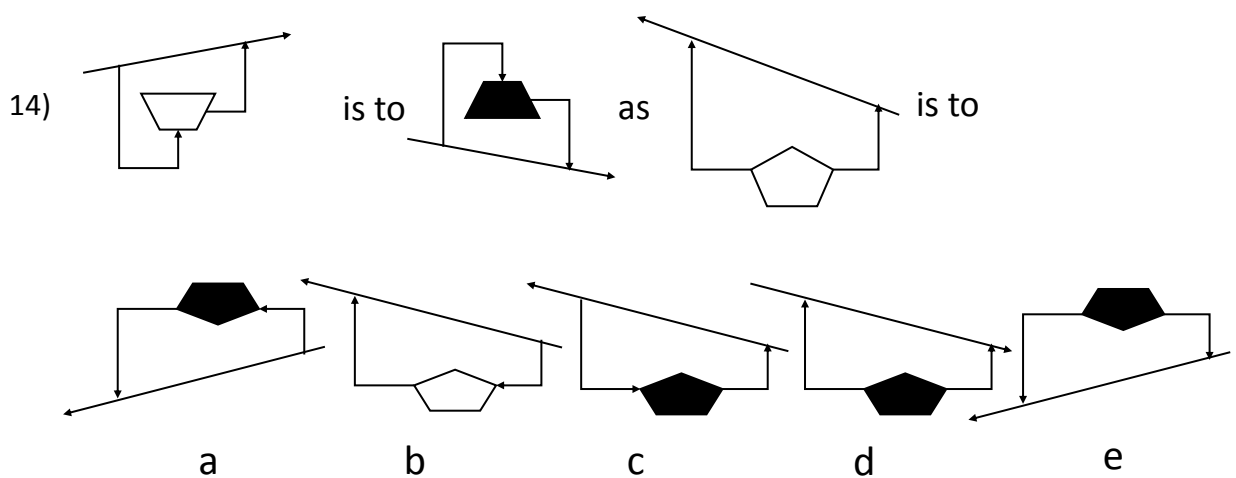..

11) is to as is to

a   b   c   d   e
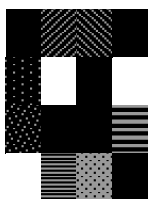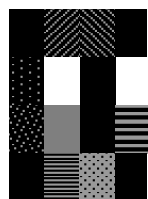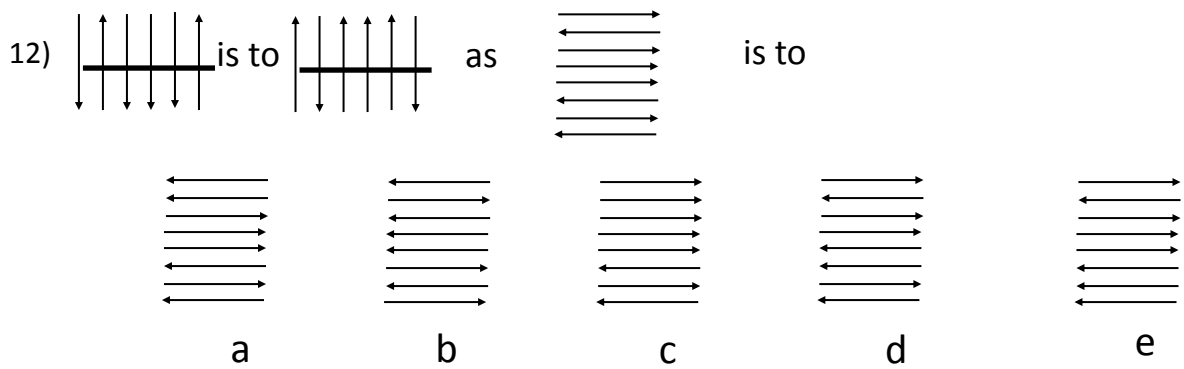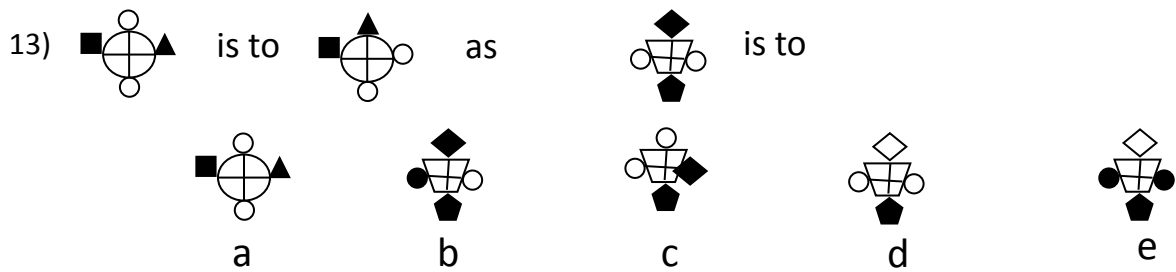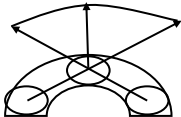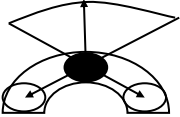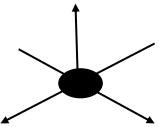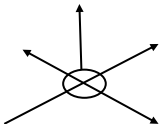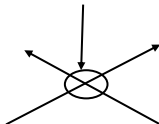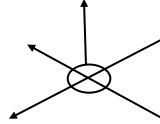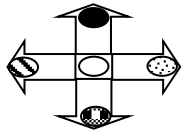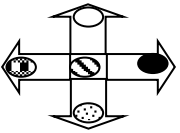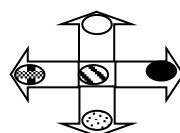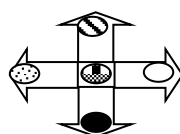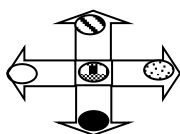
Explanation:
....
....

41

12) is to as is to

a   b   c   d   e

Explanation:
....
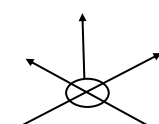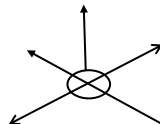..

13) is to as is to

a   b   c   d   e

Explanation:
....
....

14) is to as is to

a   b   c   d   e

Explanation:
....
....

15)

a	b	c	d	e

16)

a	b	c	d	e

17)
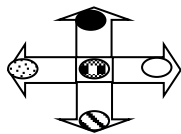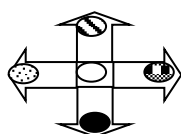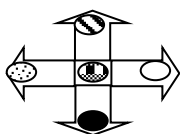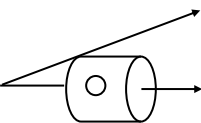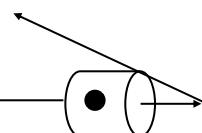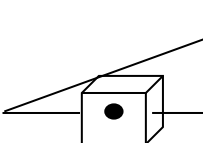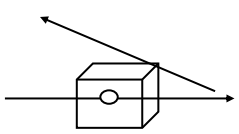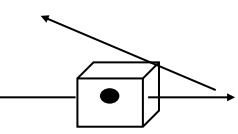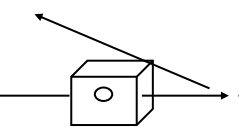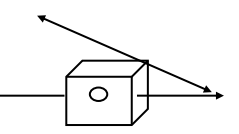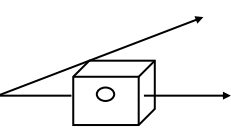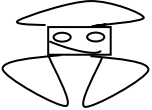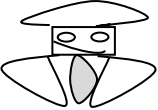
a	b	c	d	e

18)
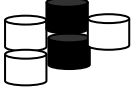
is to ...... as ...... is to

a   b   c   d   e

Explanation:
....
....

19)

is to ...... as ...... is to
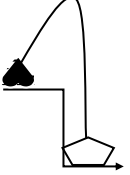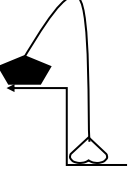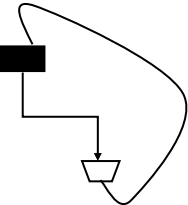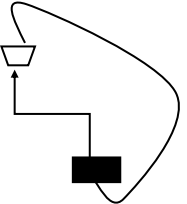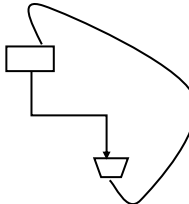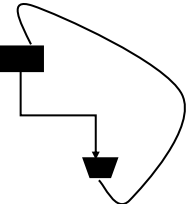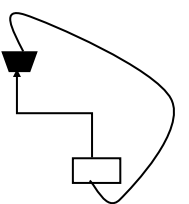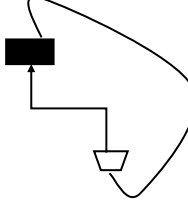
a   b   c   d   e

Explanation:
....
....

20)

is to ...... as ...... is to

a   b   c   d   e

Explanation:
....
....

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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