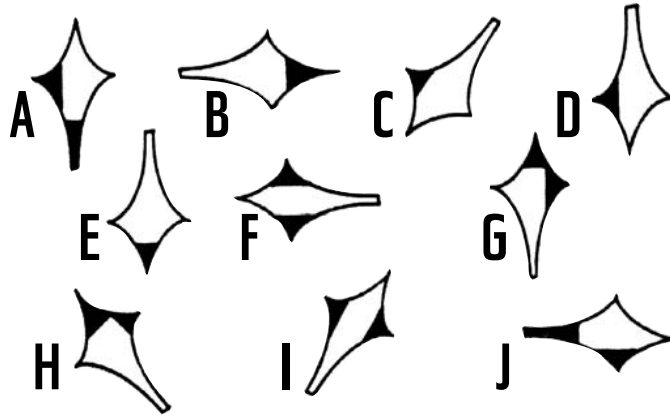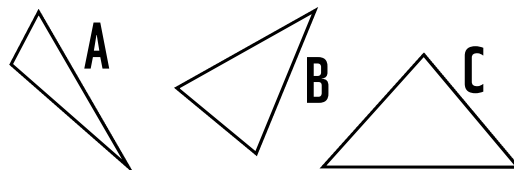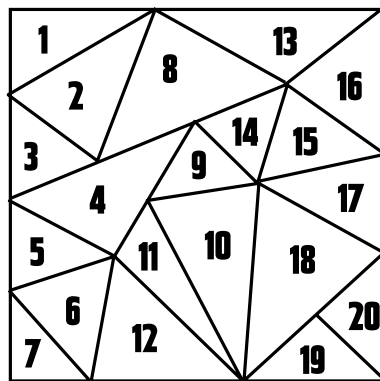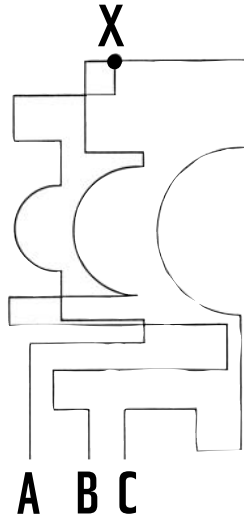**61** Arrange these into five pairs.

62 Match the three triangles at the bottom with their numbered counterparts in this square.

63 Which is the shortest and which is the longest route to X?

X

A B C

64 Which yacht is the odd one out?

A

B

C

D

E

F
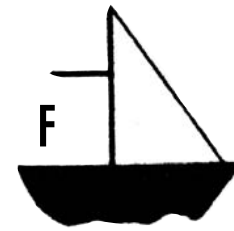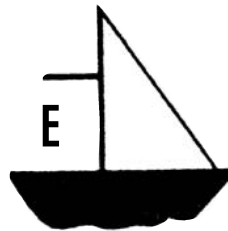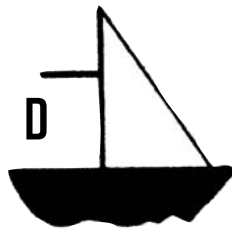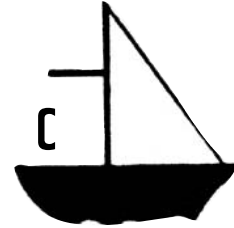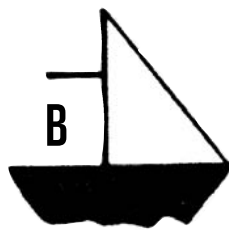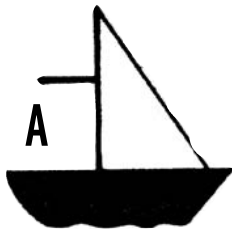
65 Which one does not agree with its counterparts?

A   B   C   D

E   F   G   H

I   J   K   L

M   N   O   P
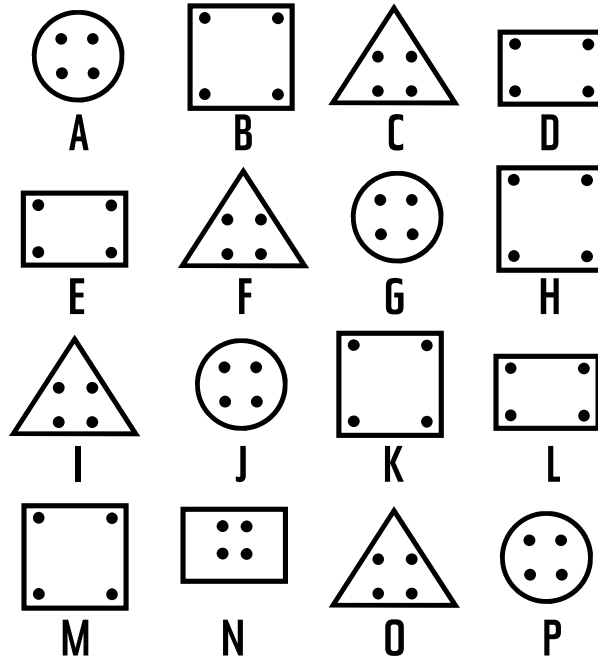
66 Which of these figures is wrong?

A   B   C

D   E   F

G
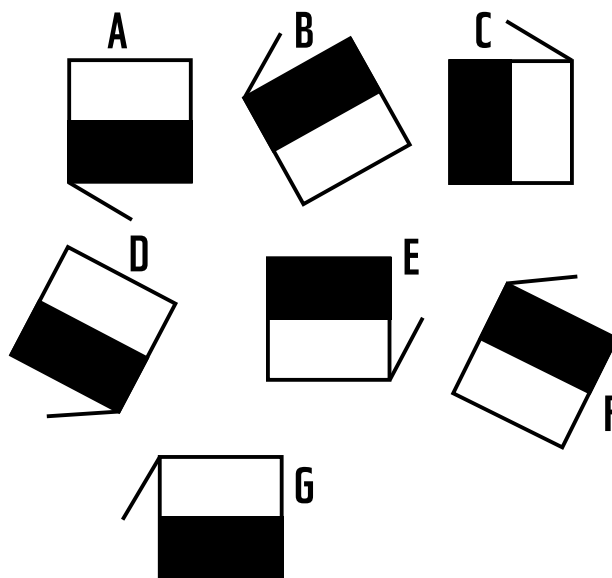
67 Who has changed his expression?
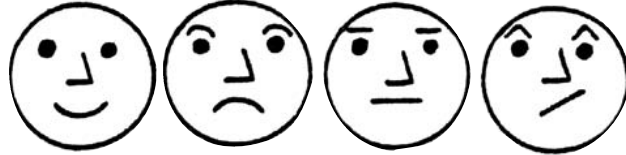
A   B   C   D
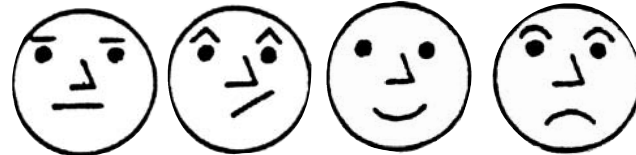
E   F   G   H
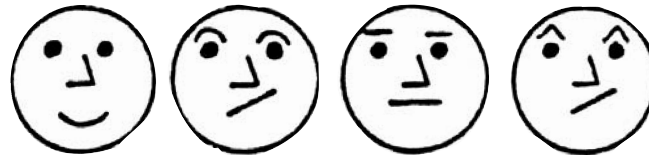
I   J   K   L

68 Arrange these patterns into four pairs.
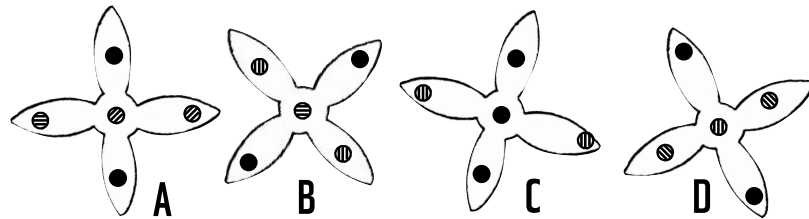
A   B   C   D
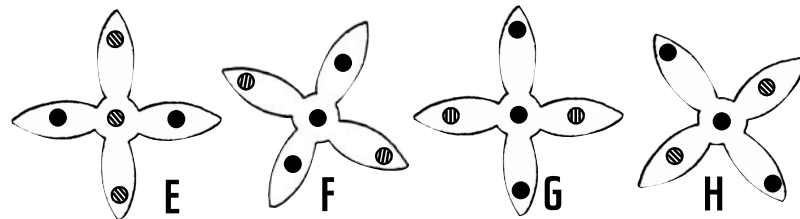
E   F   G   H

69 Arrange these into four pairs.
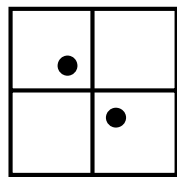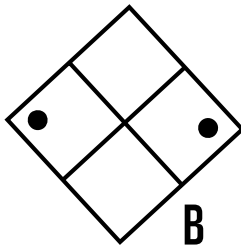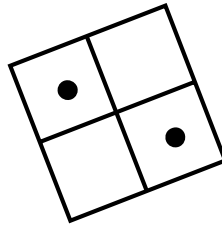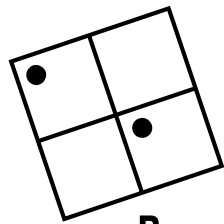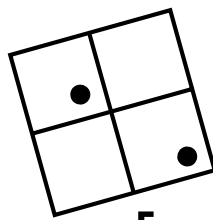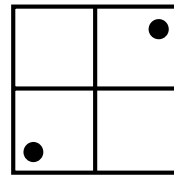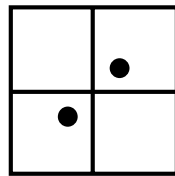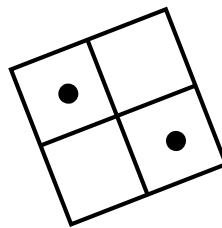
70 Which two of these shields are identical?

71 Assuming that the two top stars are correct, which of those below are wrong?

A

B

C

D

E

F

G

H
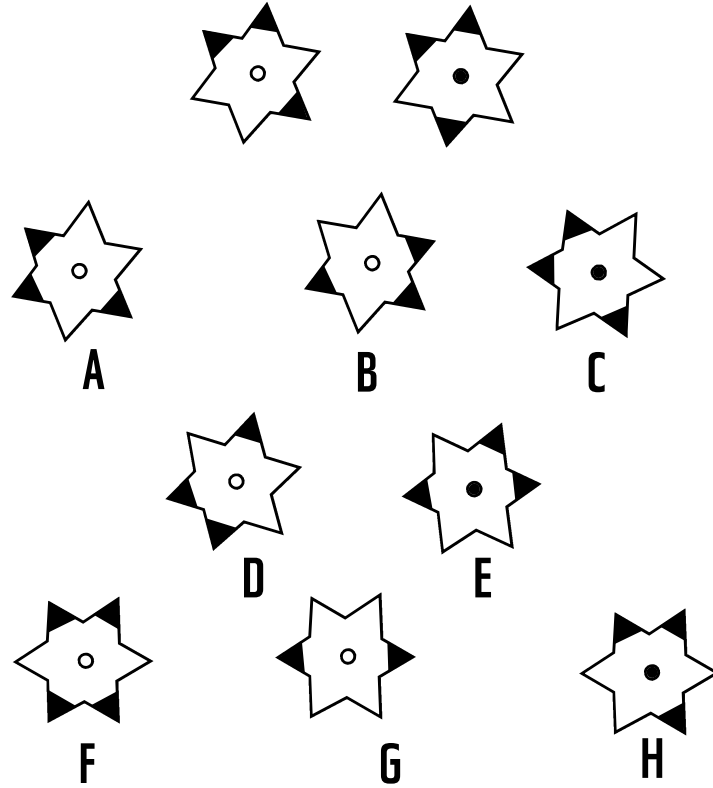
72 What trellis is wrong?

A

B

C

D

E

F
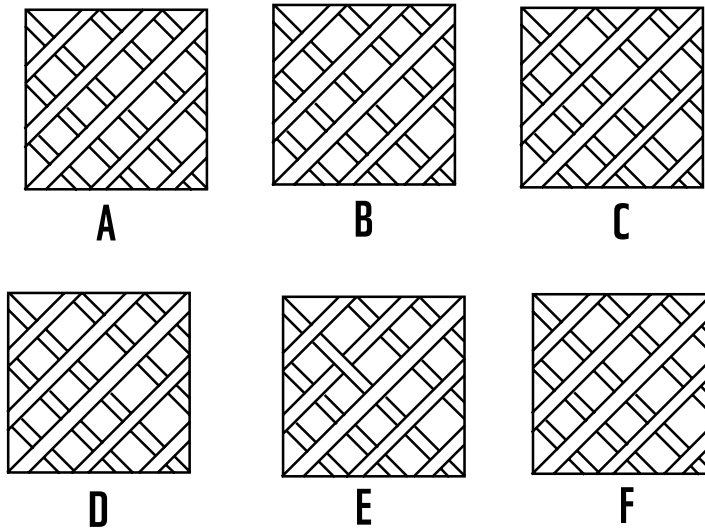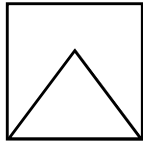
73 If is superimposed on
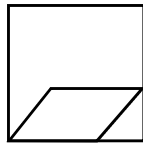
Which of the OUTLINES below will result?

A
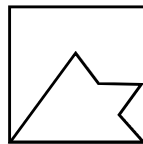
B
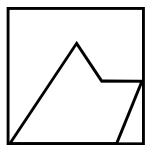
C
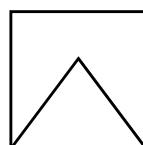
D

74 Which row is wrong?

A

B

C

D
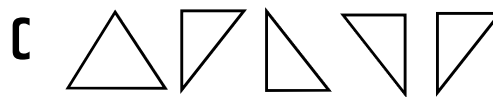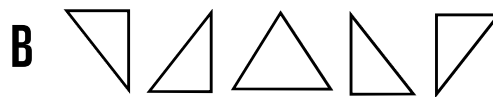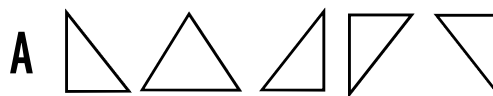
75 Which of the symbols at the bottom should take the place of X?
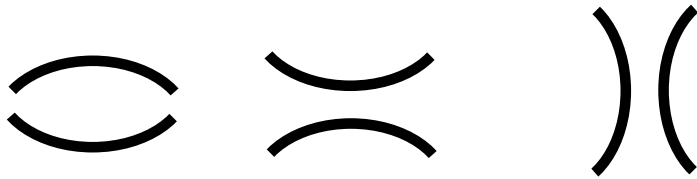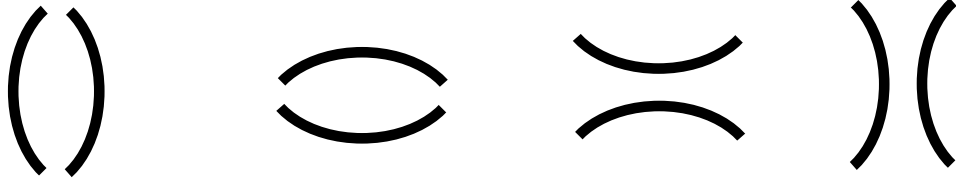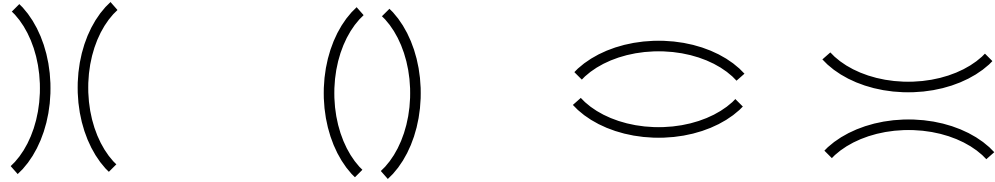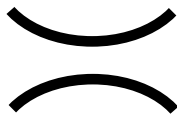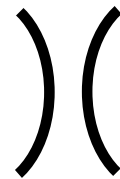
A   B   C   D

76 Which cross does not conform with the others?

1 2 3

4 5 6
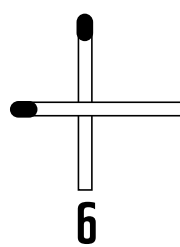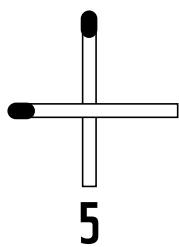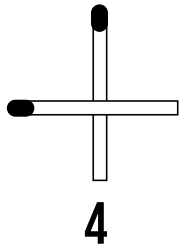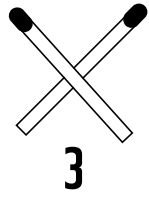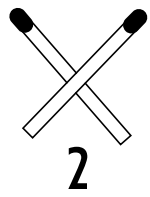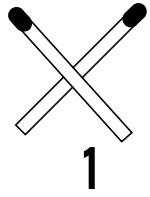
77 Which are the weak links?
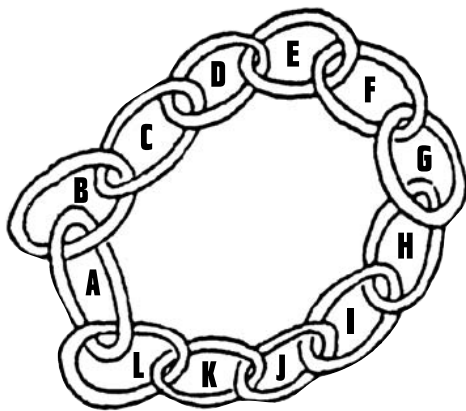
78 Arrange these into six pairs:
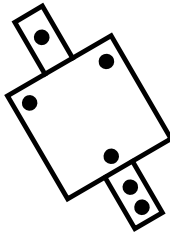
A
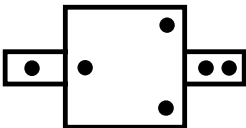
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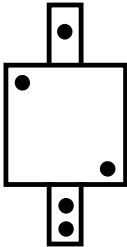
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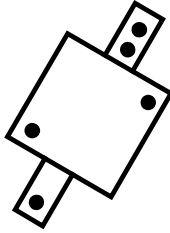
D
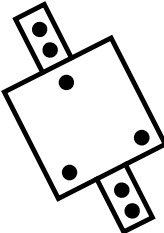
E
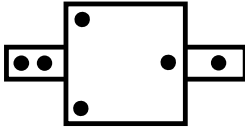
F
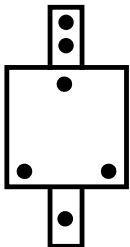
G
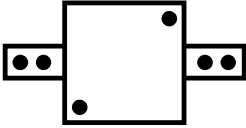
H
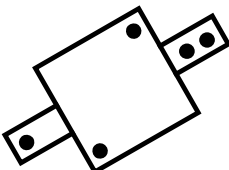
I
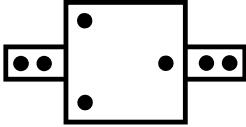
J
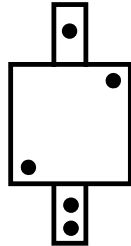
K
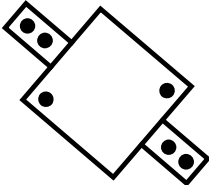
L

Answers

1 D
The bottom figure is below the higher figure.

2 E is nearest, A is furthest away.

3 2 revolutions clockwise
C (24 teeth) rotates 4 revolutions. Therefore D also rotates 4 revolutions. Pulley B has twice the circumference of pulley D and so will rotate 2 revolutions. C rotates clockwise, as B does not change the direction of C. Pulleys D and E also rotate clockwise.

4 B
A contains 7 triangles
B contains 11 triangles
C contains 10 triangles
D contains 6 triangles

5 25

6 E
The knob is on the wrong side.

7 40

8 E
The design consists of the letter S repeated 10 times, but in E one of them is the wrong way round.

9 A-C, B-F, D-G, E-H

10 C
VIII has taken place of VII.

11 G
All the others can be paired A-J, B-E, C-L, D-N, F-I, H-K and M-O

12 B
The two strands should pass over and under each other alternately, as in the other examples.

13 D
They all rotate clockwise, first to the next vane, then missing one, then two and so on.

14 H
The centre stroke is shorter.

15 21
There are 15 small hexagons and 6 large ones. The last shape in the bottom row is a pentagon.

16 N
There are two black balls instead of one white and one black.

17 D
Apart from D, each row contains one figure with one stroke, one with two strokes, one with three strokes, one with four strokes and one with five strokes. In row D there are two figures with four strokes and none with five strokes.

18 C
A, B and D all contain two circles, two squares, two straight lines and two triangles. In C there is only one triangle.

19 B
The figure is rotating clockwise.

20 C
The figures are transposed in the same way as in the example at the top.

21 3 – C
Line 1 finishes at 2, and line 2 finishes at 1.

22 A - F, B - C, D - G and E - H

23 17 is the smallest segment; 14 is the largest segment

24 A

25 K, which is longer.

26 F
Stripes go the opposite way when reflected in a mirror.

27 D
B is too big, A and C are too small.

28 42
There are 5 diamonds made with 9 squares, 12 diamonds made with 4 squares, and 25 diamonds made with 1 square.

29 B
The position of the spots is repeated in every 4th sector.

30 B

31 Glass sign on glass door
PULL on one side
PUSH on opposite side

32 A–D, B–L, C–H, E–G, F–J and I–K

33 I is the second smallest. F is the second largest

34 A 4, B 8

35 0–0 and 5–2

36 E
In E there are 4 white beads between the two black beads. In the others there are 5.

37 P
It is the only arrow pointing to the left.

38 A and F

39 A

40 A

41 J
It should be the same as C, E and P.

42 E
There are only 7 off-shoots from the centre, instead of 8, as in all the others.

43 C and E
C goes on the right side of the piece already hung; E goes on the left side.

44 A–C–H, B–E–L, D–G–M and F–I–J; K is the odd one out.

45 1 and 7 are clefs– the G, or treble, clef, and the F, or bass, clef (indicating musical pitch). 3 and 9 are crotchets; 4 and 11 are minims; 5 and 10 are quavers; 6 and 8 are semi-quavers (all musical notes). 2 is a musical time signature, in this case indicating 'common' or 4/4 time. As it has no counterpart, it is the odd one out.

46 I
This man has no hands, as seen on his counterpart – E and M.

47 A is a heart, B is a diamond, C is a heart.
By simple elimination the following emerges:
a diamond is 1 (see third vertical column)
a club is 2
a spade is 3
a heart is 4

48 E and H
In both cases the minute and the hour hands have changed places.

49 20
The black stripe is too narrow

50 F
There are 5 related pairs:
A (cricket bat) with J (cricket ball)
B (tennis ball) with E (tennis racquet)
C (table tennis bat) with H (table tennis ball)
D (billiards ball) with K (billiards cue)
G (golf ball) with I (golf club)
F (football) is on its own

51 B

or
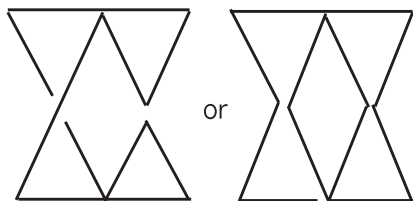
52 A
The figure is rotating clockwise, 45 degrees at a time. 6 and 7 indicate that the vane is shaded entirely on its blind side as compared with 1, 2 and 3.

53 b (BILL); c (TOM); d (JIM); e (FRED)

54 A3, B5, C1, D6
In the first line the shading moves from top to bottom.
In the second line it moves from left to right.
In the third line it moves from bottom to top.
In the fourth line it moves from right to left.

55 6

56 B
From top to bottom, traffic lights are coloured red, amber and green. They change as follows: red and amber together – green – amber alone – red. As the amber light is showing, it will be followed by the red (B).

57 C

58 D
Examination of the previous globes shows that the globe is rotating left to right.

59 F
The right edge of the horizontal line forming the cross should not be shaded, as compared with C and K.

60 B
Other than in B, the designs are made up with a square, a triangle, a rectangle, a right angle and a line. In B, there are two squares but no rectangle.

61 AJ; BE; CD; GH; FI

62 A11; B2; C8

63 C is the shortest route; B is the longest route
The curves may have misled you, since it might appear that the biggest curve – in C – gives the longest route. In fact, the curves are semicircles, the length of which is estimated on the formula of 3.14 approx, multiplied by the radius.

64 B
The mast is too far forward.

65 N
The dots in the rectangle are too close together as compared with those in the other rectangles – D, E and L.

66 A
When the diagonal line from the base-line of the square inclines to the right, as in C, E and G, the right half of the square is black.
When it inclines to the left as in B, D and F, the bottom half of the square is black.
In A the right half of the square should be black.

67 J
The mouth should be as in B and H.

68 AE, BD, CG, FH.

69 AG, BF, CH, DE.

70 B and J.

71 F and G.

72 E
The diagonal slat from the top left to bottom right should pass under the other slats.

73 B

74 C
Except for C, each row contains 1 equilateral triangle, 2 right-angled triangles with the base at the bottom and 2 with the base at the top. In C, there are 3 right-angled triangles with the base at the top and only 1 with the base at the bottom.

75 C
In each row the first symbol is the same as the second in the previous row and the other symbols continue in the same order.

76 2
When the head of the match points to the left, that match should lie on top of the other match. In 2 it lies underneath.

77 G and H

78 AG, CI, BF, DK, EJ, HL

Word Puzzles

1 In a game of whist, GEORGE partnered MARY, while TED had to select a partner from ANN, EDNA, JOAN or ANGELA. Whom did he choose?

2 Which of the following statements are true and which are false?

A. If this clock is gaining, the pendulum weight should be moved downwards.

B. The majority of these shapes are convex.

C. A spider has six legs.

D. The majority of these are stalagmites.
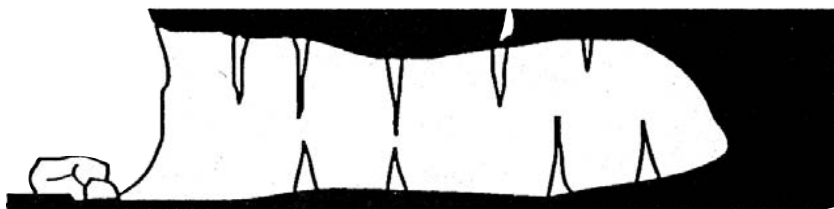
3 The Barber of Seville shaves all of the men living in Seville.
No man living in Seville is allowed by law to shave himself.
The Barber of Seville lives in Seville.

Who shaves the Barber of Seville?

4 Here are two lists of words.

List A, each word has two possible pair words in List B.

List B, each word has two possible pair words in List A.

There are two possible solutions.

Pair a word from each list until you have 10 pairs.

List A	List B
SEVERN	TRACTOR
ARROW	RIVER
TURRET	BULLS–EYE
FARM	BOW
YARBOROUGH	TANK
SAND	CARDS
YEW	CASTLE
VEHICLE	BANK
RIPARIAN	WOOD
JACK	BRIDGE

5 Arrange the following female names and male names into groups of three:

OLIVE   ISABEL

PRIMROSE   MYRTLE

GARNET   DIAMOND

PEARL   SANDY

MARTIN   MAVIS

ROBIN   POPPY
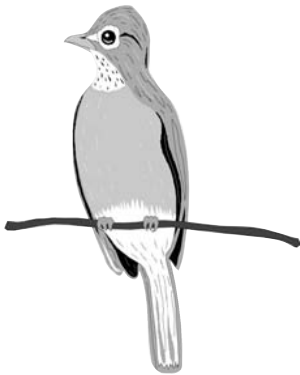
6 The safe can only be opened by using the keys in the correct order that spells out a word. What is that word? Every key must be used just once.

Y C H E D
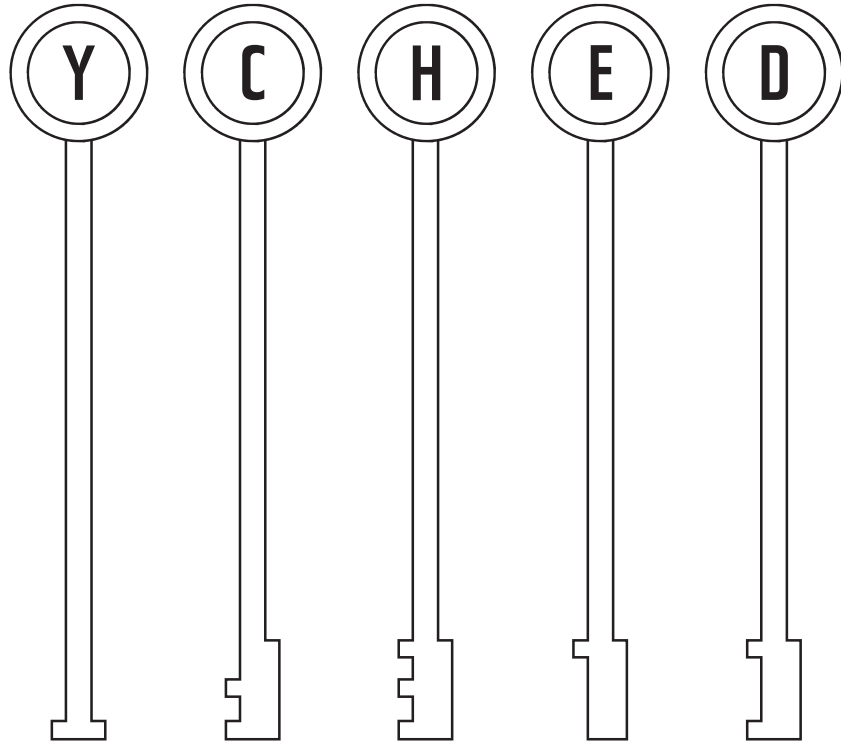
7 All of the vowels have been omitted from this saying. Put them back to produce the saying.

FTFRST   YDNT   SCCD   TRYTRY

GNTHNQTT   HRSNSNS BN

GDMNF   LBTT

8 What is two days after the day after the day before yesterday?

9

Clue: Hanging about over the water? (10-6)

Find the (10-6) letter word. Find the 1st letter. Draw a straight line to the 2nd letter, then to the 3rd letter and so on. The enclosed areas have been filled in.

10 Place all of the letters of the alphabet in the grid to make a x-word. 9 letters have been placed for you.
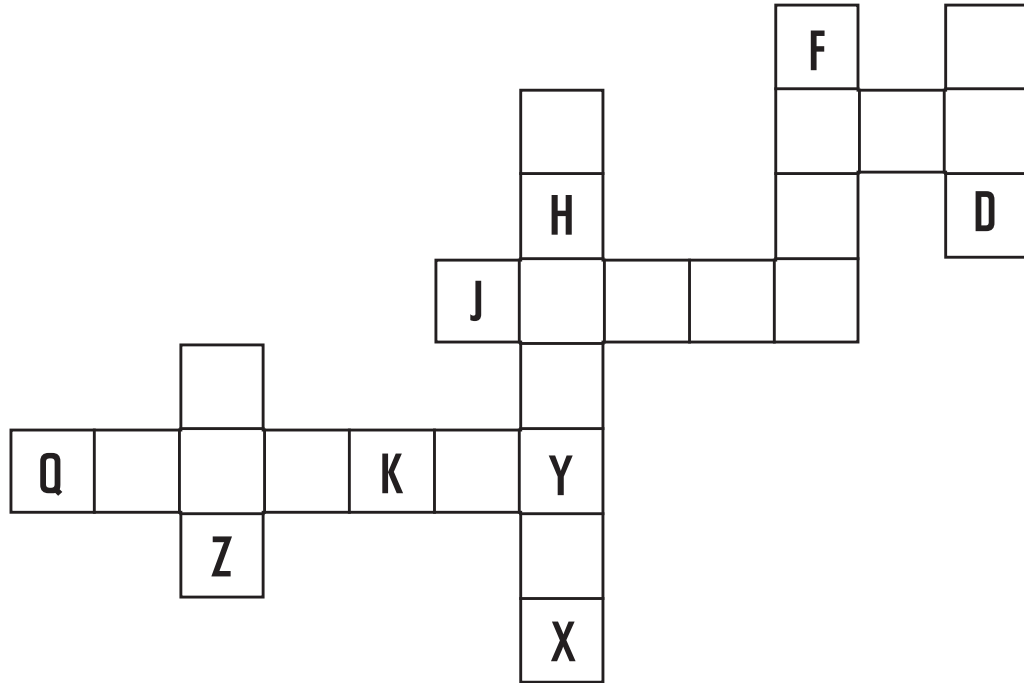
A B C D E F G H I J K L M N
O P Q R S T U V W X Y Z

11 Arrange these shapes in order according to the number of sides, starting with the one with the least number:

A OCTAGON

B HEXAGON

C PENTAGON

D DECAGON

E TETRAGON

F NONAGON

G HEPTAGON

12 For his latest creation Frankenstein takes half of CONNIE, part of NESTA, part of NELLIE, and part of AUNTIE.

What does Frankenstein call his creation?

13 Solve the following rebus.

I   A

N

R   B
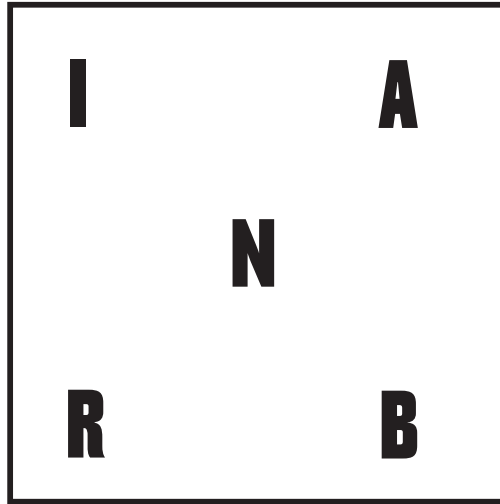
14 Place all of the letters of the alphabet in the grid to make a crossword.

8 letters have been placed for you.

Q   J   W

M   V   X

Z   H
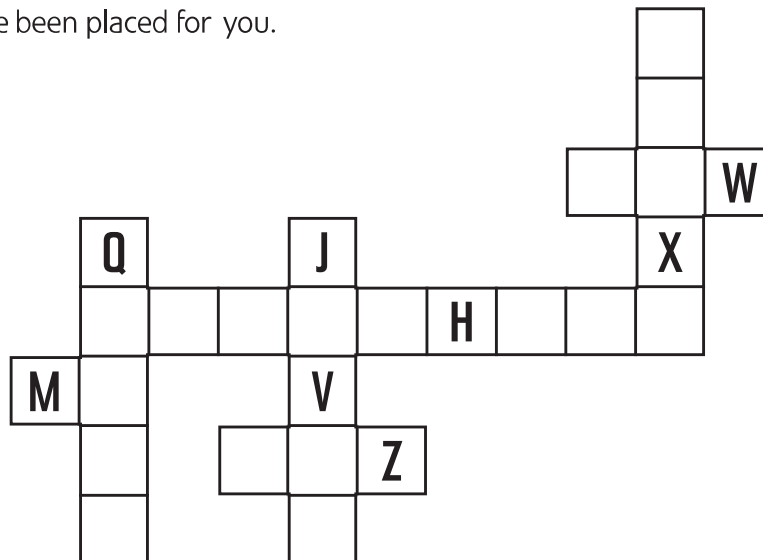
15

Clue: You need this to run before the wind. (9)

Find the (9) letter word. Find the 1st letter. Draw a straight line to the 2nd letter, then to the 3rd letter and so on. The enclosed areas have been filled in.

16 What word is represented by the seven cards at the bottom?
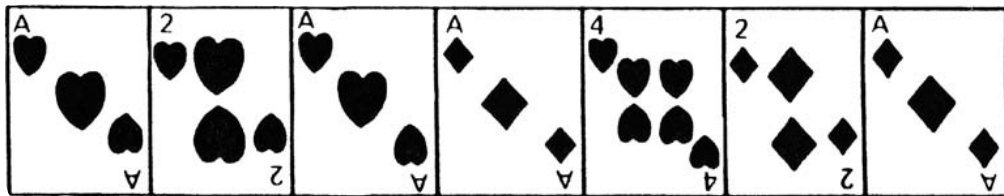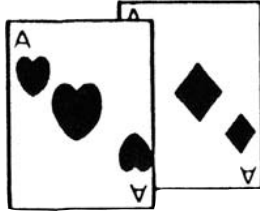
17 Which row is the odd one out?

A. K	N	Q	T	W	Z
B. B	F	J	N	R	V
C. A	F	K	P	V	Z
D. 3	6	9	12	15	18
E. 7	11	15	19	23	27
F. 13	18	23	28	33	38

18 Replace the letters with numbers.

```
        C O P S
       C L O S E
      C E L L A R
      C O R P S E
        C A S E
  +   C O L L A R
      R E C T O R
```

19 Replace the letters with numbers.

```
      T W E L V E
      T W E L V E
      T W E L V E
      T W E L V E
      T W E L V E
  +   T H I R T Y
      N I N E T Y
```

20

Clue: Spindrift skimmers! (4-7)

Find the (4-7) letter words. Find the 1st letter. Draw a straight line to the 2nd letter, then to the 3rd letter and so on. The enclosed areas have been filled in.

21 Place the 26 letters of the alphabet in the grid to make a crossword. 8 letters have already been placed.
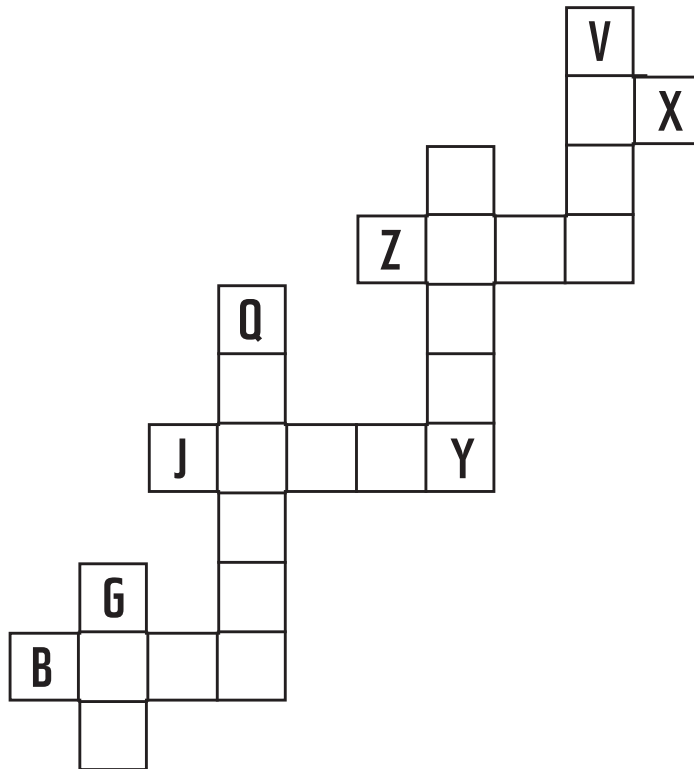
A B C D E F G H I J K L M N
O P Q R S T U V W X Y Z

22 What are X and Y?

5	20
8	J
W	25
16	T
A	4
5	K
C	7
X	L
A	Y
4	N

23 Solve the rebus.

NILE

HO HO HO
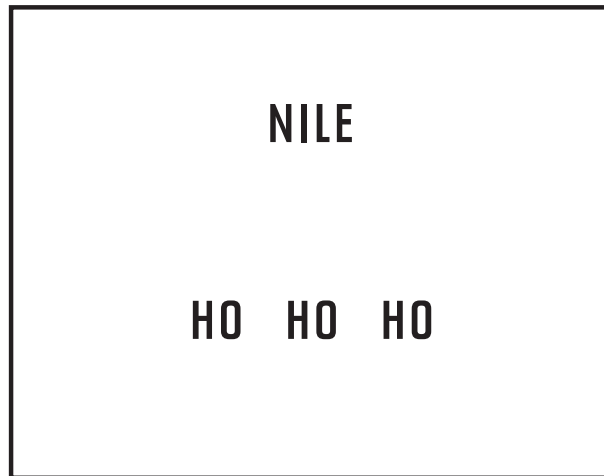
24 Pair these words to make nine titles of books by Charles Dickens:

A	**LITTLE**		**1**	**RUDGE**
B	**PICKWICK**		**2**	**COPPERFIELD**
C	**EDWIN**		**3**	**TIMES**
D	**BARNABY**		**4**	**CHUZZLEWIT**
E	**NICHOLAS**		**5**	**PAPERS**
F	**HARD**		**6**	**HOUSE**
G	**BLEAK**		**7**	**DROOD**
H	**DAVID**		**8**	**DORRIT**
I	**MARTIN**		**9**	**NICKLEBY**

25 What is X?
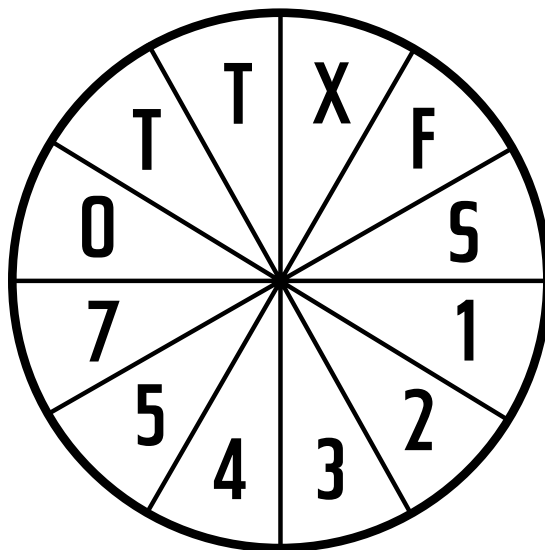
26 These are the recognised names given to groups of creatures, but they have been mixed up. You have to re-arrange them correctly.

Colony of Birds

Horde of Spiders

Den of Wild Pigs

Clutter of Crows

Nest of Snakes

Park of Elks

Doylt of Ferrets

Gang of Machine Guns

Business of Swine

Volery of Artillery

Hover of Gnats

Drift of Frogs

27
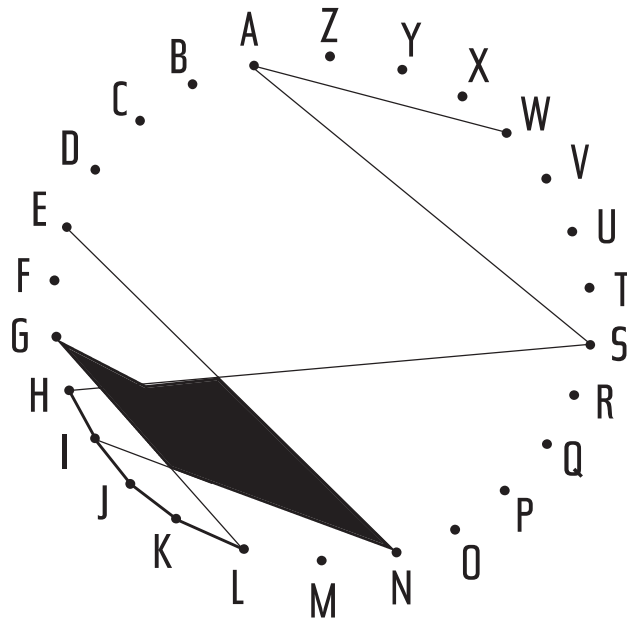
Clue: Place where the duds hang out? (7-4)

Find the (7-4) letter words. Find the 1st letter. Draw a straight line to the 2nd letter, then to the 3rd letter and so on. The enclosed areas have been filled in.

28 Place the 26 letters of the alphabet into the grid to make a x-word.

7 letters have already been placed for you.

Z					Q
				F	
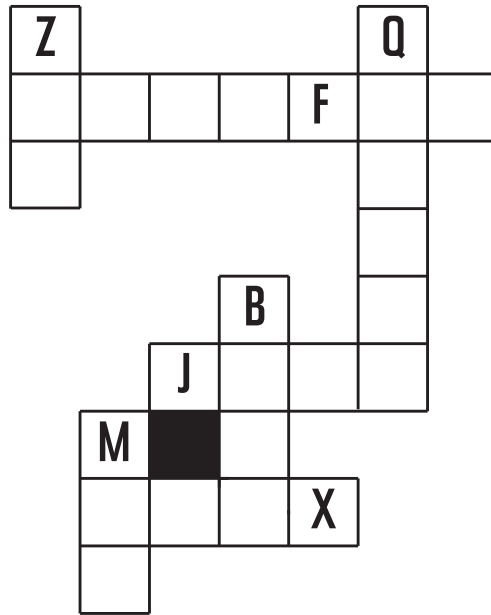
A B C D E F G H I J K L M N
O P Q R S T U V W X Y Z

29 These names of groups of objects have been mixed up. Your task is to re-arrange them.

STALK	of	HUNTERS
BUILDING	of	SWANS
CLOUD	of	MAGPIES
SKULK	of	FORESTERS
COVERT	of	LAPWING
HERD	of	BAGDGERS
CONVOCATION	of	FRIARS
SORD	of	COOTS
BLAST	of	ROOKS
DESERT	of	MALLARD
TIDING	of	EAGLES
COLONY	of	SEAFOWL
NIDE	of	PHEASANT

30 Guess the catchphrase:

> ANOTHER 1
> ANOTHER 1
> ANOTHER 1
> ANOTHER 1
> ANOTHER 1
> ANOTHER 1
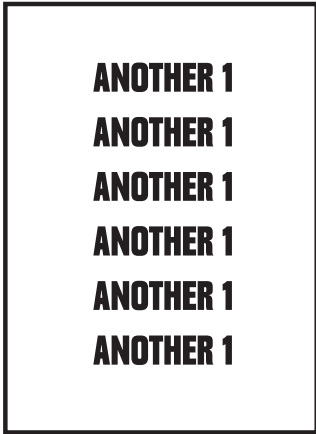
31 The Pharoah asked: "Who is the greatest of the gods?"
'I am not" said Horus.
"Anubis is" said Isis.
"Isis is lying", said Anubis.
Only one god was telling the truth, the other two were lying.
Who is the greatest?

32 Can you discover six male forenames in the outer ring and six female names in the inner ring?

33 Magic Squares can be very intriguing, whether they use number in which each line, column and diagonal adds up to the same number, or whether they use words. Usually a magic word square consists of a number of different words which can be read both across and down as in the example:
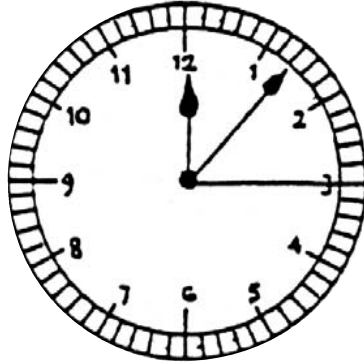
K	I	N	D
I	D	E	A
N	E	A	T
D	A	T	A

However, below is a magic word square with a difference.

Can you fill in the three missing letters so that this is, indeed, a magic word square?

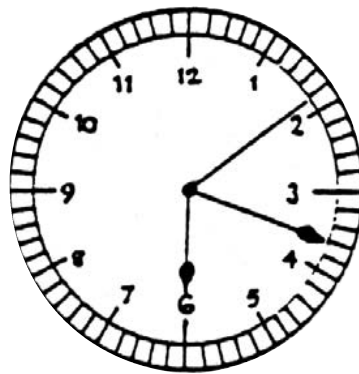| S		I	D
E	I	O	I
R		N	G
P	A		I

34 What does the third clock show?

LOG
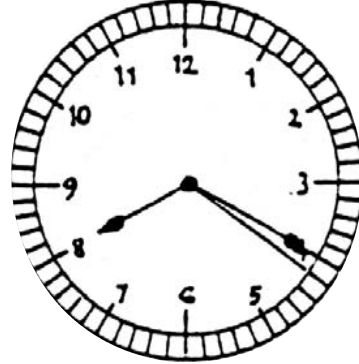
HUT

35 A colour is concealed in each of these sentences:

A Temper or anger are signs of weakness.

B The money is for Edward.

C You'll find I got it elsewhere.

D One dancer, I see, is out of step.

E 'I'm a gent and a lady's man,' he said.

36 At the scene of a heinous crime, five suspects, one of whom is the guilty party, are being interrogated by a detective. Each of the suspects gives one statement and it later transpires that just three of these statements are correct.

These are the statements:

Uncle Jack : Uncle Jim committed the murder
Aunt Mary : I did not do it
Cousin Stewart : It was not Cousin Margaret
Uncle Jim : Uncle Jack is lying when he says I did it
Cousin Margaret : Aunt Mary is telling the truth

Who committed the murder?

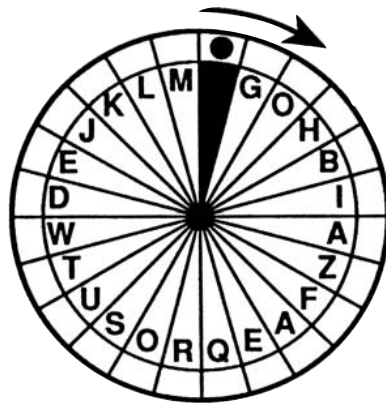**37** Which of these statements are true and which are false?

A. When a car is driven forwards the wheels rotate anti-clockwise.

B. If a clock is put forward $1\frac{1}{4}$ hours the minute hand moves through 450°.

C. When a clock reads 4.10 the acute angle between the hands is exactly 60°.

38 What will be the result if the hands of this clock are moved as follows:
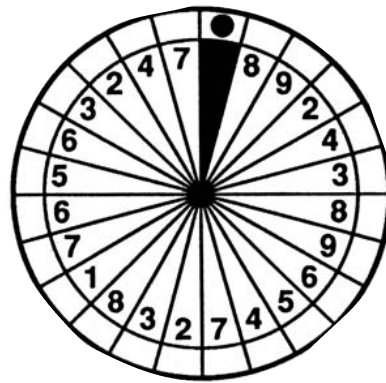
A. forward 3 hours, 15 minutes

B. back 4 hours, 25 minutes
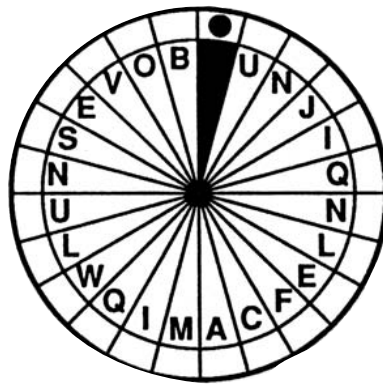
C. back 1 hour, 30 minutes
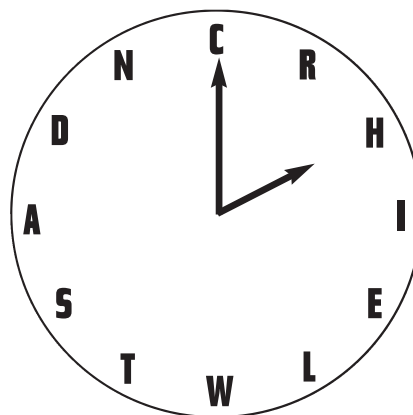
39 The ball in A moves clockwise, first one letter, then missing one and going onto the next, then missing two, and so on. If it lands on a consonant the ball in B moves to one number clockwise; if it lands on a vowel the ball in B moves to the third number ant-clockwise. If the ball in B lands on an even number the ball in C moves three letters clockwise; if it lands on an odd number the ball in C moves four letters anti-clockwise. What word will be spelt by the ball in C after seven moves?

A

B

C