Part I
Assorted Puzzles

9th World Puzzle Championship
October, 2000

1	Friday the 13th	20 points
2	Common Touch	5+5+10 points
3	Alternate Corners	10 points
4	Cut the Q	10 points
5	Broken Mirror	10x2 points
6	Times 4	15 points
7	ABC Connect	15 points
8	Overlay	15 points
9	Distance	15 points
10	Balancing Act	20 points
11	River Crossing	20 points
12	Rectangles	20 points
14	Tents	20 points
15	Rolling Cube Maze	20 points
16	Paint It Black	25 points
17	Square Re-construction	25 points
18	Railroad Track	25 points
19	Gridlock	30 points
20	Symbolic Dominoes	45 points

Below are the names of 18 actors and actresses from the long-running *Friday the 13th* film series. Thirty-five of the 36 first and last names can be found independently in the grid proceeding in regular word-search fashion—horizontally, vertically, and diagonally, always in a straight line. When the puzzle is done, one name will be left over. Which name is it?

It is not necessary to circle all the answers in the grid—just identify the unused first or last name.

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Y O U R M O J D Z E R N A S O
S U S A N A R A B R A B H T R
R T R V B E H N N Y W D L O G
U K C A L R I A L B K R N L J
F S L H I G Y L M E P A U L A
M P A S A Y O M V M A H G I V
A M C V N R U I A Y P C U L S
H K A O A B N E T S R I K A Z
G L T C F G G O S R T R V P E
N U E A U V E O E S A E A A R
I F L E R B R Z B R U C E L N
B P L B E K I M M E L L I L E
N O S L E N O J E R B A K E R
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AMY STEEL	KEVIN BLAIR	RON PALILLO
BARBARA BINGHAM	KIRSTEN BAKER	SHAVAR ROSS
BRUCE MAHLER	LARRY ZERNER	STU CHARNO
CAROL LACATELL	MARK NELSON	SUSAN BLU
DANA KIMMELL	PAUL KRATKA	TONY GOLDWYN
JOHN FUREY	RICHARD YOUNG	TRACIE SAVAGE

In each of these three puzzles, the 7 famous names in the YES group all share an unusual property, which none of the names in the NO group have. For each puzzle, pick one of the 8 names from the Answer List at the bottom of the page that shares the property in the YES group.

Note: the answers have nothing to do with the people themselves—only their names.

	YES	NO
Puzzle 2.1 5 points Answer:	KAREEM ABDUL-JABBAR GERMAINE GREER MELANIE GRIFFITH JOHN KENNEDY JOMO KENYATTA ARNOLD SCHWARZENEGGER ANTHONY TROLLOPE	BJORN BORG NICOLAI GOGOL JEAN LAFFITE GIOACCHINO ROSSINI JEAN-CLAUDE VAN DAMME SIGOURNEY WEAVER

	YES	NO
Puzzle 2.2 5 points Answer:	FATTY ARBUCKLE CORNELIU CODREANU JOHANN DIEFFENBACH LOU GEHRIG GREG LEMOND JOSEPH ROSATI PIRET TRUUVERT	CHARLOTTE BRONTË IAN FLEMING FRANK KELLOGG ABRAHAM LINCOLN SAMUEL SOTHEBY JAMES THURBER

|	YES	NO
Puzzle 2.3 10 points Answer:	ERNEST ANSERMET LOUIS AUCHINCLOSS EARL AVERILL RAY BRADBURY ANNA MAGNANI MARIA MALIBRAN LEW WALLACE	CLAUDIA CARDINALE ANTONÍN DVORÁK ENRIQUE IGLESIAS NILS LOFGREN ROSA LUXEMBURG BRIAN MULRONEY

Answer List: FIDEL CASTRO, LOUIS FARRAKHAN, GIANCARLO GIANNINI, JOYCE KILMER, MARILYN MONROE, MARTINA NAVRATILOVA, EERO SAARINEN, LISA STANSFIELD

Find a single closed loop that passes through every square exactly once and never crosses itself. The path travels horizontally and vertically, but never diagonally.

The path must make a 90° turn at every circle. Every second turn must be made at a circle, and every other turn must be made in a square without a circle.
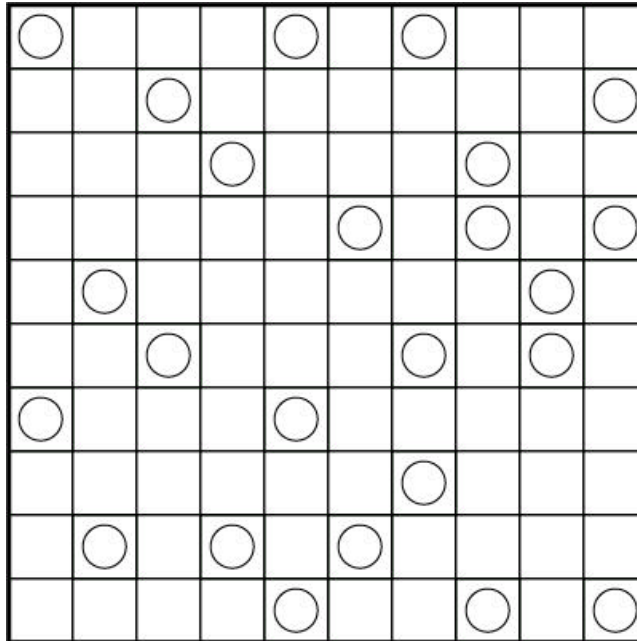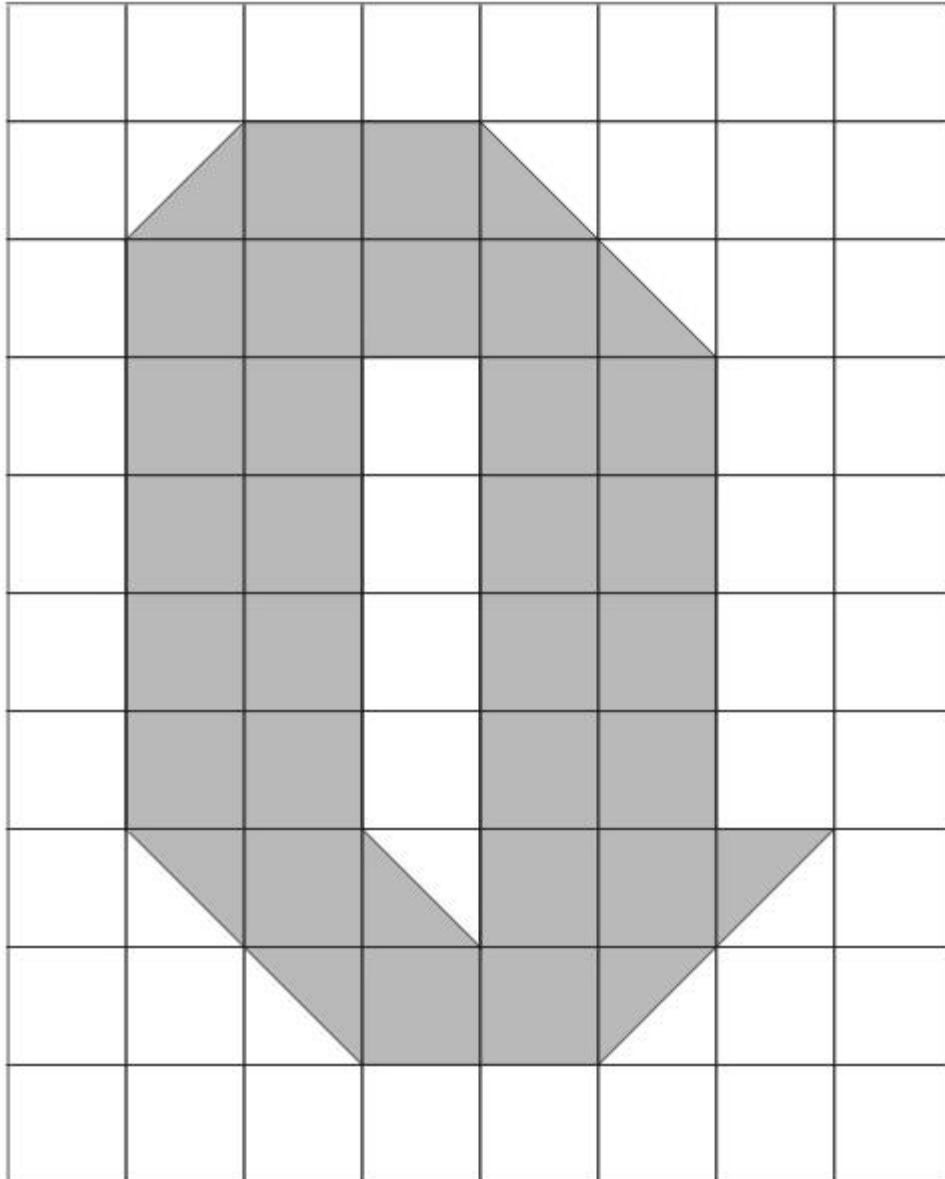
Cut the Q into two congruent regions. (The two regions must be the same size and shape, but may be rotated and/or reflected.)

The grid lines are given only to show the true proportions of the diagram; your cuts may be anywhere.

5 - Broken Mirror	10x2 points

The bottom picture is a mirror image of the top picture, except for 10 details. Find as many of the differences as possible, earning 2 points each.

Identify the differences by circling them in the BOTTOM picture.
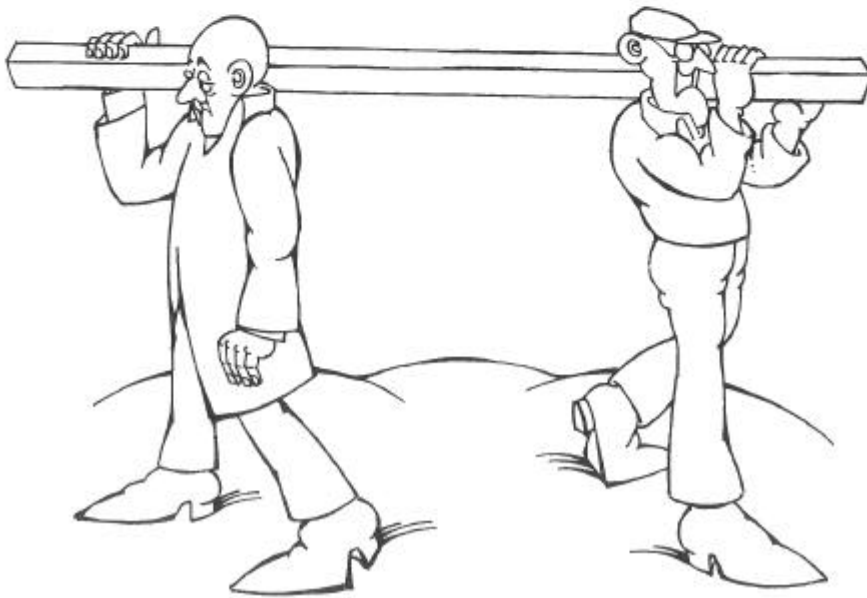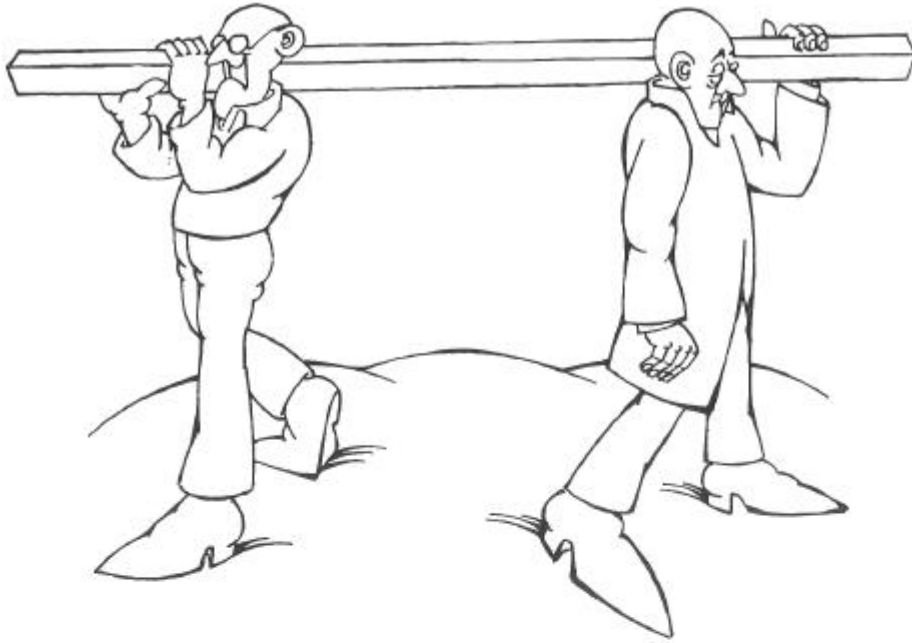
The same letter-symbol substitution is used in each multiplication problem, each symbol representing a unique digit. Replace all of the symbols with their corresponding digits so that each multiplication is correct.

Draw paths connecting each pair of identical letters. Each path travels through squares horizontally or vertically, and it cannot cross itself or another path. Every square in the completed puzzle with be used exactly once. A path cannot turn back on itself.
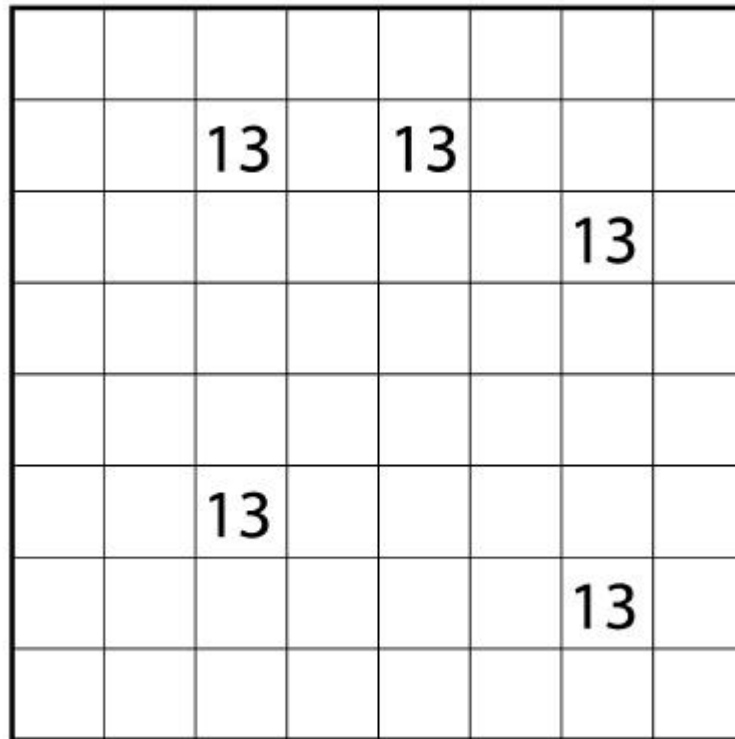
					B			A	
		F							
						B	D		
		E	C	F					
						E	C		
	A								D
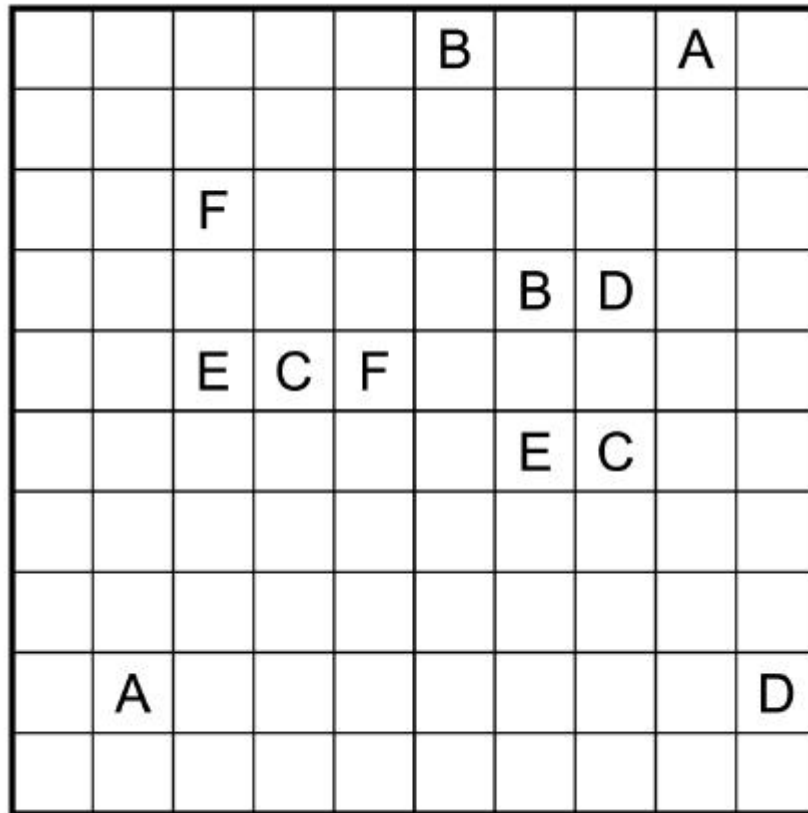
Draw rectangles using the grid lines so that each number is the sum of the areas of all the rectangles that contain that number.

Rectangles can overlap; but no two rectangles can share an edge or touch at their corners.

		13		13			
						13	
		13					
						13	

Place the numbers 1 through 12 in order into the circles so that the distance between successive pairs (measured between the centers of the corresponding circles) is always greater than the previous pair.

The distance between 1 and 2 must be less than the distance between 2 and 3, which in turn must be less than the distance between 3 and 4; etc.
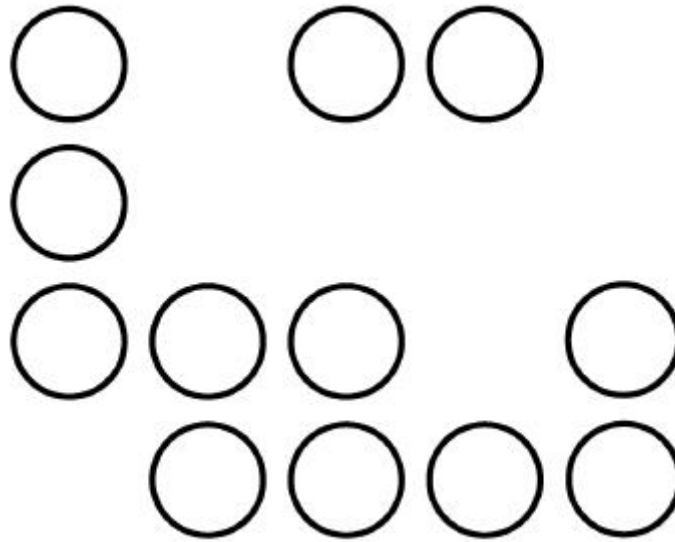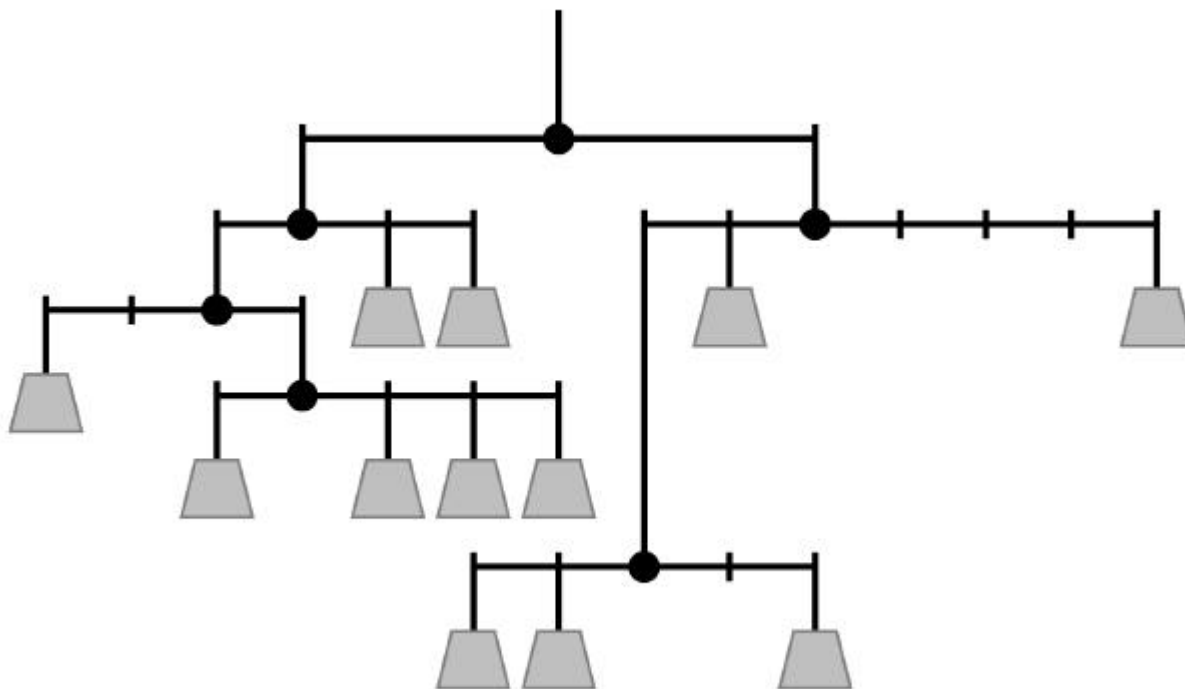
Assign the values 1 to 12 to the weights in the diagram so that everything balances as shown. (At each fulcrum, the total torque on both sides of the balance must be the same.) Each value will be used exactly once.
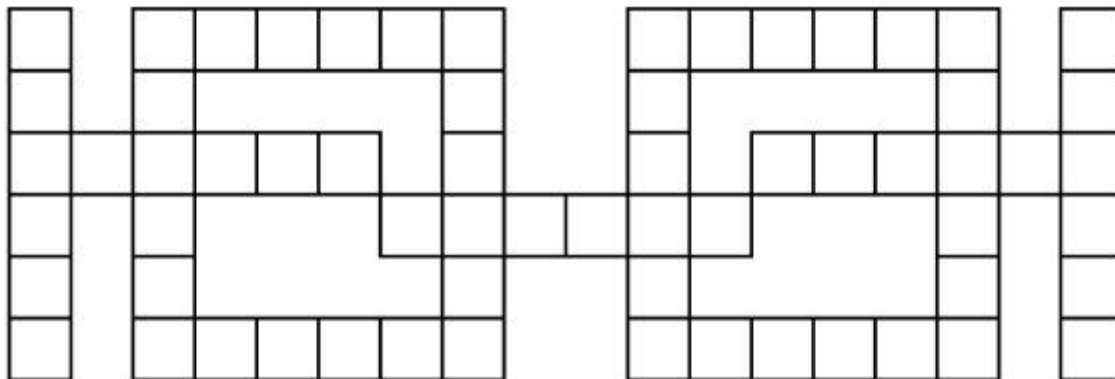
Fit 13 of the following 14 river names in the crisscross grid, one letter per space, following the usual crisscross rules ... EXCEPT answers may read either backward or forward. When you're done, one name will be left over. Which one is it?

Note: it is not necessary to complete the crisscross to solve the puzzle—just identify the unused name.

AMAZON	KWANGO
BRAZOS	MEKONG
DANUBE	MOHAWK
FRASER	MORAVA
GAMBIA	OTTAWA
GANGES	ST. JOHN
JORDAN	THAMES

Divide the grid into 28 rectangular regions so that each rectangle contains exactly one number, and so that each number represents the number of squares of its corresponding rectangle.
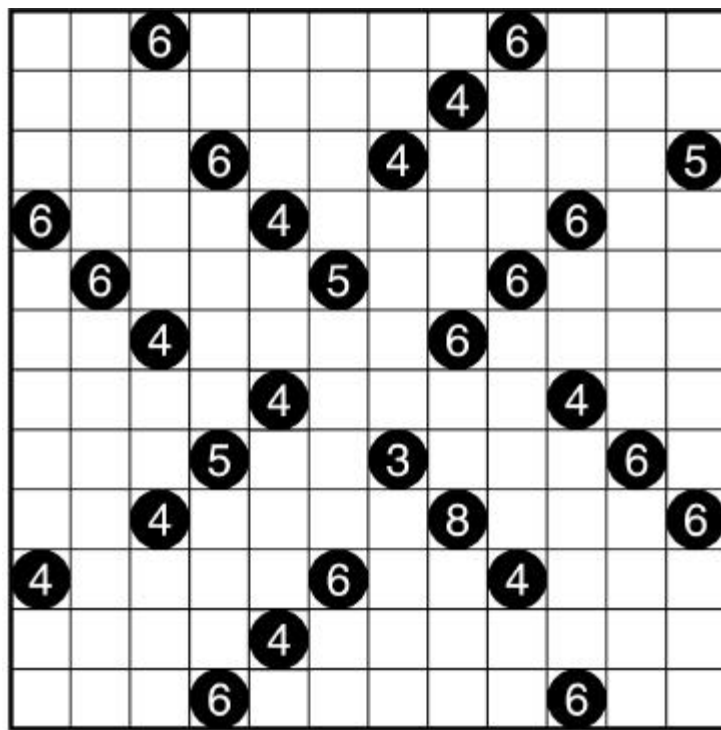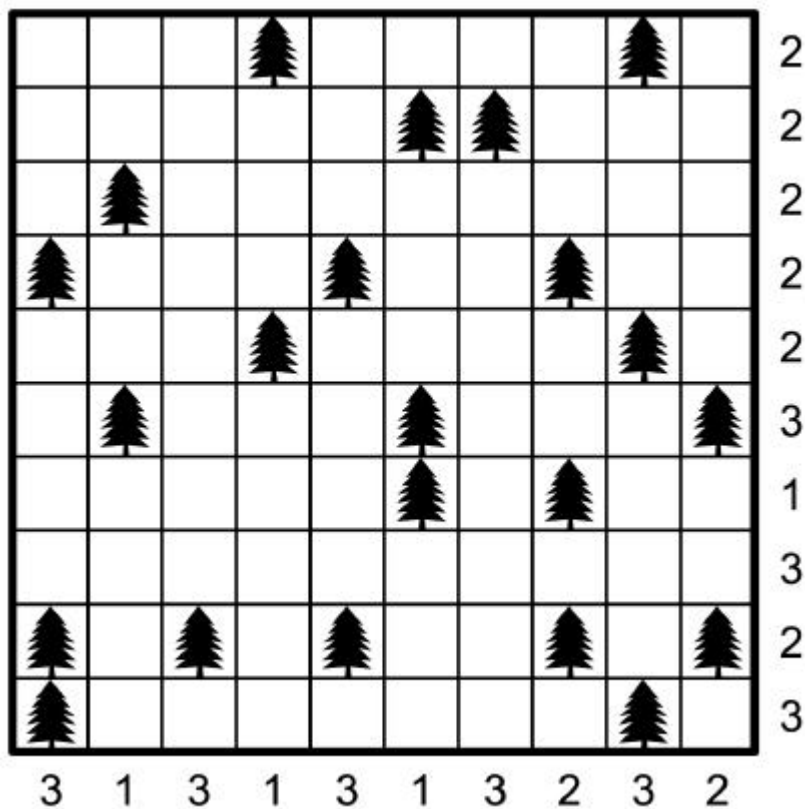
Locate the tents in the grid. Each tree is connected to exactly one tent, found in a horizontally or vertically adjacent square. Tents do not touch each other, not even diagonally. The numbers outside the grid reveal the total number of tents in the corresponding row or column.

Roll the dark cube from Start (S) to Finish (F) without the white face ever facing down. The white face is face up at the Start, and **must be face up at the Finish**. The dark cube must stay within the boundaries of the 7x7 grid. The 10 light gray cubes are barriers that do not move.

For each move, the cube can roll one space in any direction where the corresponding horizontally or vertically adjacent square on the grid is vacant. The edge of the cube that touches the destination square is the axis of rotation for the move.

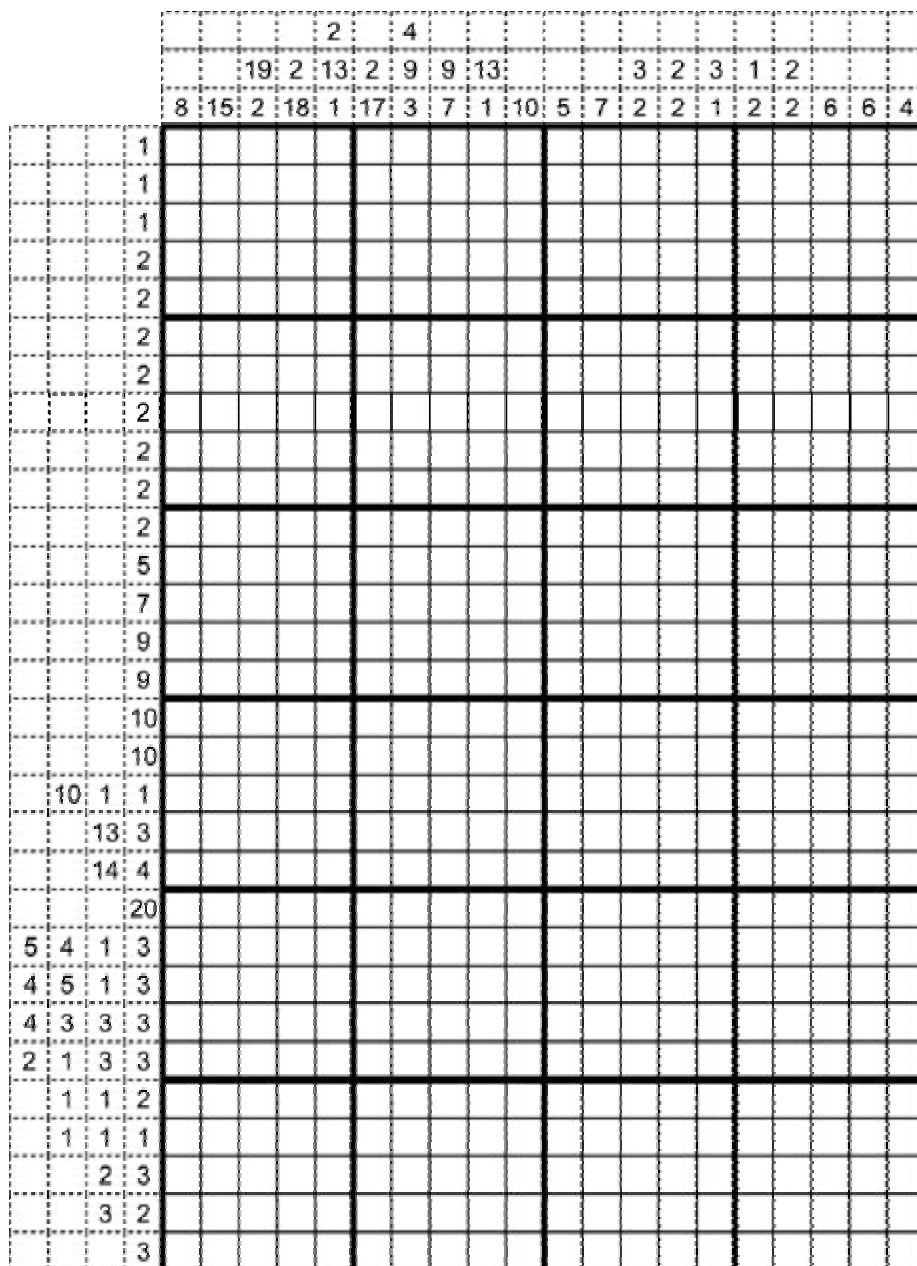Write the compass direction for each move in the space provided below.
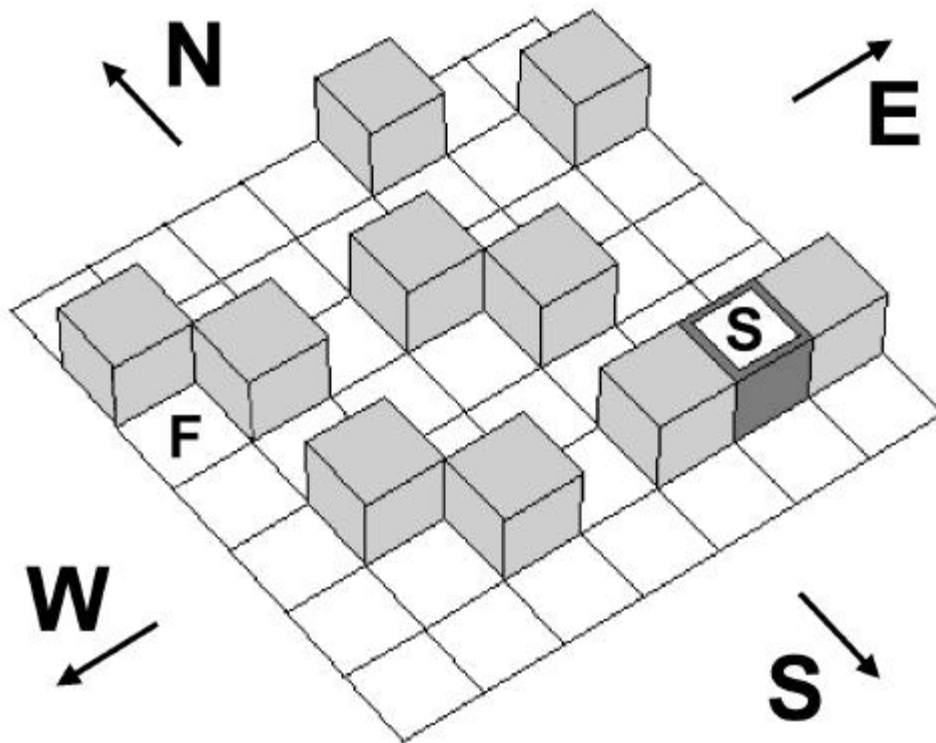
The numbers outside the grid indicate how many groups of black squares there are in the corresponding rows or columns and, in order, how many consecutive black squares there are in each group.
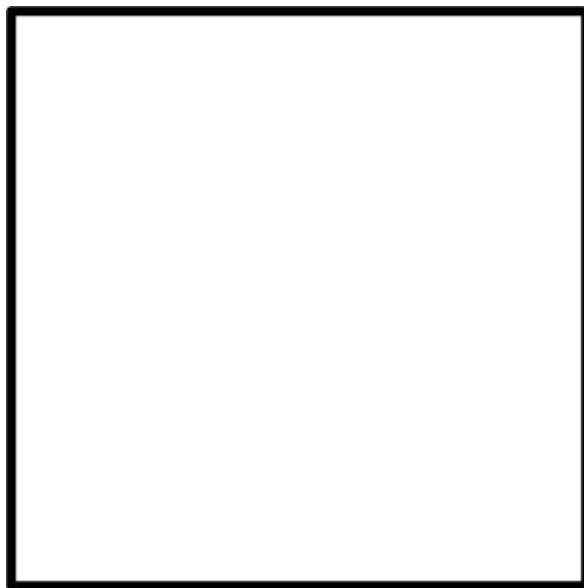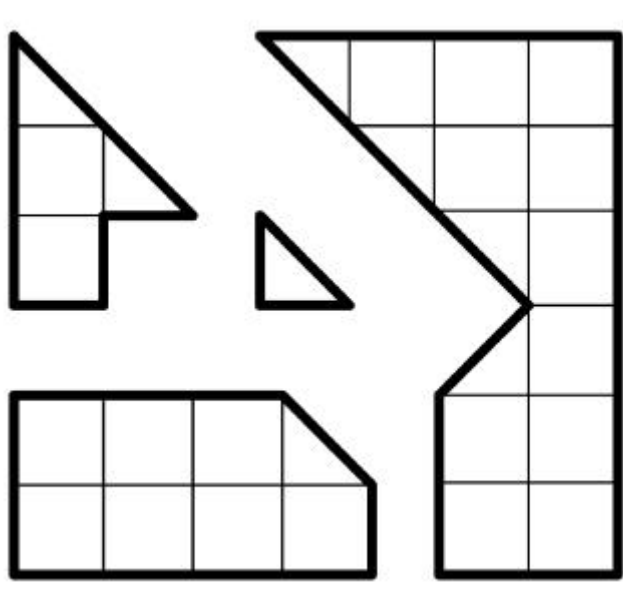
Column clues (top, read down each column):

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                        2       4
        19  2  13  2  9  9  13              3  2  3  1  2
      8 15  2  18  1  17  3  7  1  10  5  7  2  2  1  2  2  6  6  4
```

Row clues (left of grid, top to bottom):

```
1
1
1
2
2
2
2
2
2
2
2
5
7
9
9
10
10
10  1  1
13  3
14  4
20
5  4  1  3
4  5  1  3
4  3  3  3
2  1  3  3
1  1  2
1  1  1
2  3
3  2
3
```

Rearrange, resize, reflect, and revolve the four pieces to make a square. Draw your answer in the square given below.

The grid lines divide the given pieces into squares and right-isosceles triangles to indicate their true proportions.

Lay a single, closed loop of railroad track that travels through every square of the grid. The track connects squares horizontally or vertically, and crosses itself only in the squares with crosses. (All the crossings are already placed)

The track does not turn as it passes through the stations, which are the squares containing numbers. As you follow the track, visit stations 1 through 13 in order, then return to station 1.
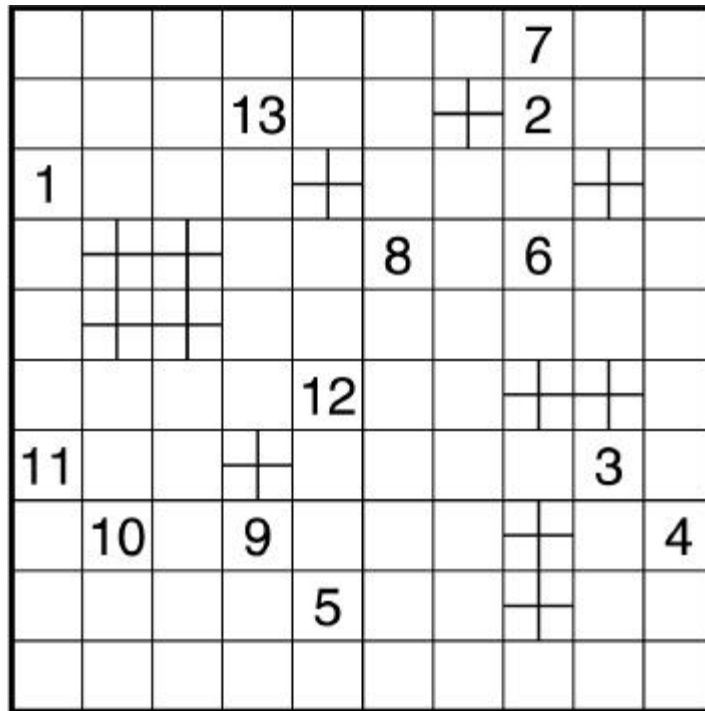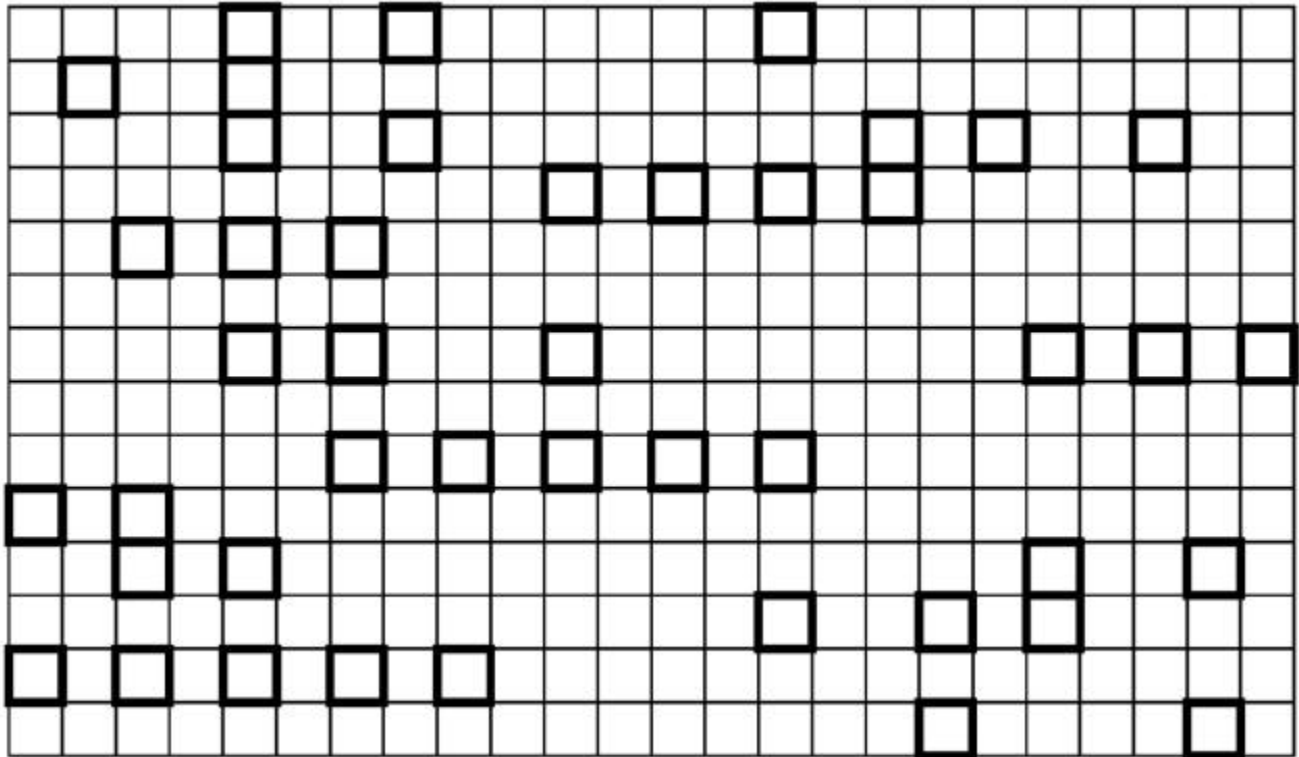
Enter the names of the 37 car models into the grid. All the squares where names cross are highlighted. For each name in the word list, the number of other names that it crosses is given in parentheses.

There are no words in the completed grid other than the given car names. In other words, if two letters are adjacent vertically or horizontally, then they must be part of a car name.

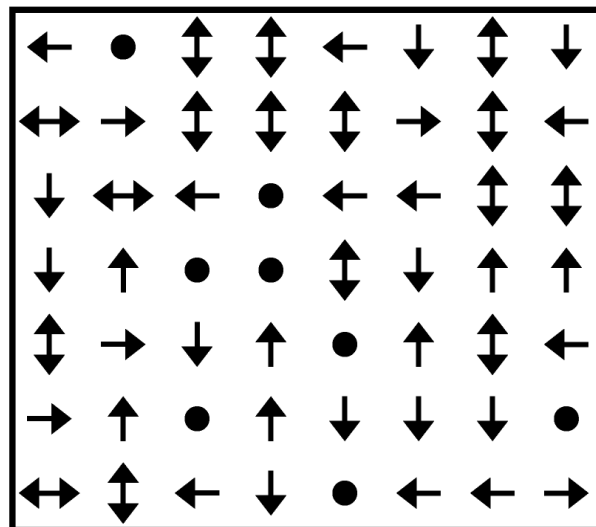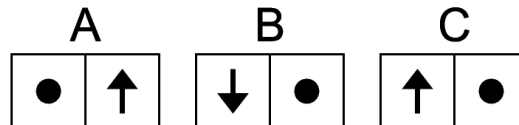| ACURA (2)	EAGLE (2)	LADA (2)	PLYMOUTH (3)
AMC (2)		LANDROVER (2)	PORSCHE (4)
AUDI (2)	FORD (1)	LEXUS (1)	
		LINCOLN (3)	RENAULT (2)
BMW (2)	GEO (1)		
BUICK (2)	GMC (1)	MAZDA (2)	SAAB (1)
		MERCEDES (1)	
CADILLAC (5)	HONDA (2)	MERCURY (2)	TOYOTA (2)
CHEVROLET (5)		MITSUBISHI (5)	
CHRYSLER (2)	ISUZU (3)		VOLKSWAGEN (4)
CITROEN (1)		NISSAN (2)	VOLVO (3)
	JAGUAR (3)		
DATSUN (3)	JEEP (2)	OLDSMOBILE (4)	YUGO (2)
DODGE (2)			

A set of 28 dominoes is in an 8x7 rectangular tray. The layout is shown but without the domino edges. Reconstruct the missing edges.

This unusual set of dominoes uses 3 symbols (circle, arrow, and double-arrow) and their orthogonal rotations. All permutations of the symbols are included in the set, except that duplicate patterns due to rotational symmetry are excluded. For example, dominoes A and B are the same, but A and C are different.