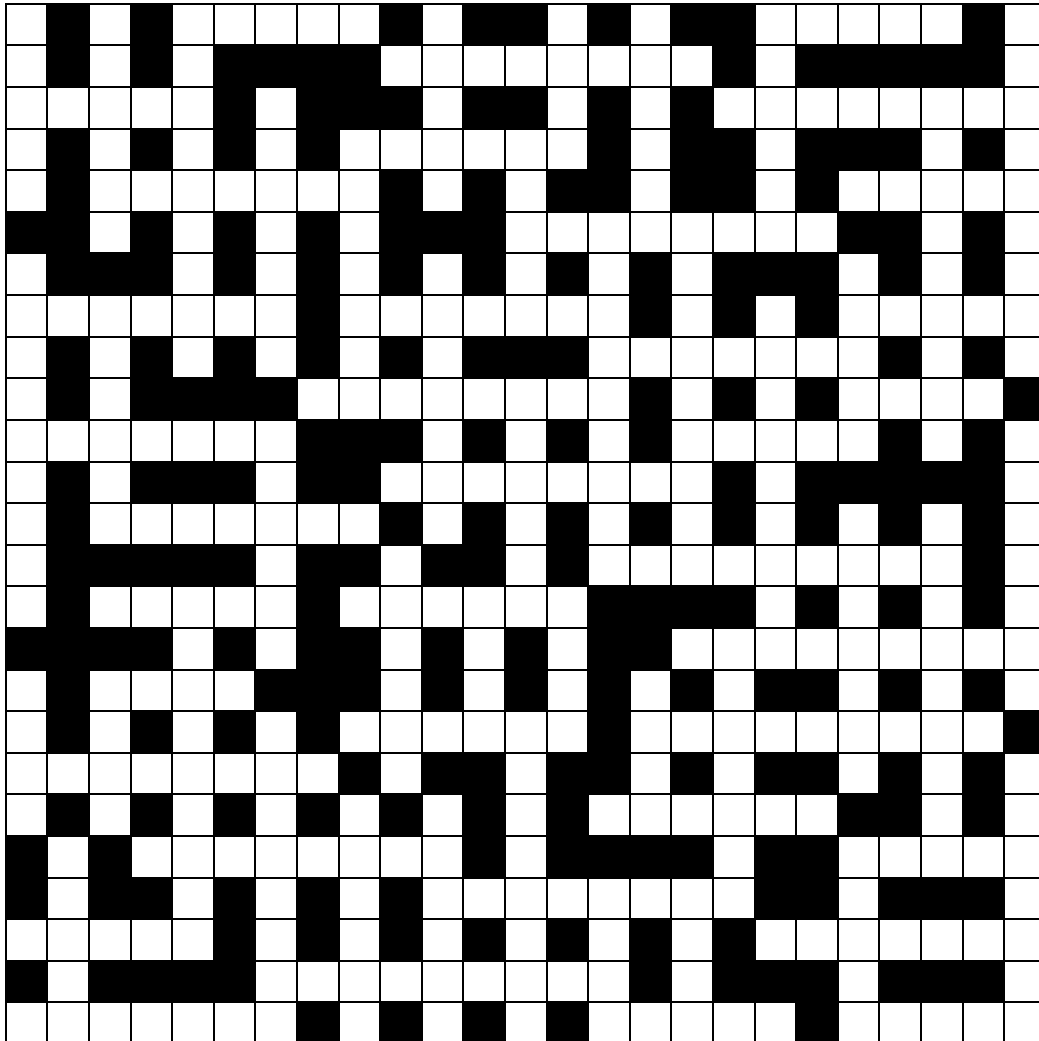


### Crisscross (\*\*)

Fit all of the following city names in the crisscross grid, one letter per space, following the usual crisscross rules.

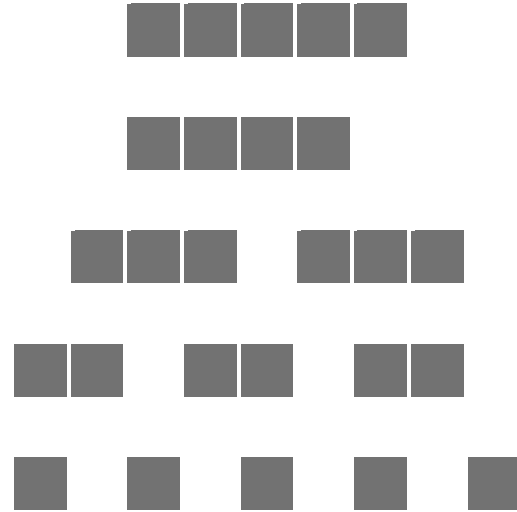


- |      |       |        |         |          |           |
|------|-------|--------|---------|----------|-----------|
| ARES | ACCRA | BOGOTA | ANDORRA | BELGRADE | BALTIMORE |
| BERN | AMMAN | HAVANA | BANGKOK | CANBERRA | BARCELONA |
| BONN | ASWAN | JAIPUR | CARACAS | CAPETOWN | EDINBURGH |
| BRNO | DAKAR | KAUNAS | CHICAGO | IRKOETSK | FAIRBANKS |
| FARO | DUBAI | LUSAKA | DETROIT | ISTANBUL | ISLAMABAD |
| GAZA | HAIFA | MOSCOW | HAMBURG | KINGSTON | GUATEMALA |
| KIEL | KYOTO | NARVIK | JAKARTA | SURABAYA | MELBOURNE |
| NICE | LEEDS | ODENSE | KARACHI | TASJKENT | PYONGYANG |
| RIGA | MALMO | PATRAS | MUNCHEN | WINNIPEG | ROTTERDAM |
| WICK | MIAMI | PRAGUE | NAIROBI | YOKOHAMA | ROVANIEMI |
|      | OMAHA | SKOPJE | RANGOON |          | SINGAPORE |
|      | OSAKA | TANGER | SEVILLA |          | STOCKHOLM |
|      | PARMA | VIENNA | TORONTO |          | TIMISOARA |
|      | PUSAN |        | UTRECHT |          |           |
|      | SEOUL |        | VILNIUS |          |           |
|      | SOFIA |        |         |          |           |
|      | TAMPA |        |         |          |           |

### Alphabet Battle Ships (\*\*\*)

Put the fleet in the grid, ships cannot touch each other, not even diagonally. Every character of the alphabet can be used exactly once. Where are the ships situated?

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



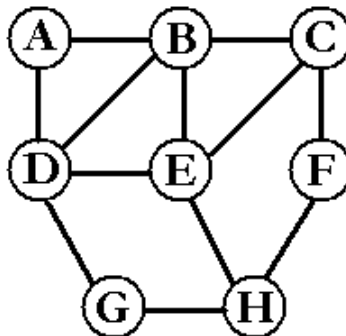
### Game of Cards (\*\*\*\*)

From a deck of cards only the numbered cards are placed in a 6x6 diagram. The numbers right to and above the diagram give the sum of the numbers in that particular row, column or diagonal. In every row, column and diagonal all the card numbers are different. Some cards are already given and also all the colors. How are the 36 cards placed?

				3		31	
♠	♠	♥	♣	♣	♠	34	
♦	♦	4	♥	♦	♥	♦	34
	6						37
♠	♥	♥	♠	♠	♣		44
4							44
♦	♣	♥	♣	♣	♦		27
♦	♦	♥	6	♠	♥		40
♠	♠	♥	♦	♣	♣	2	40
36	35	43	40	32	30	34	

### Shortest Paths (\*\*)

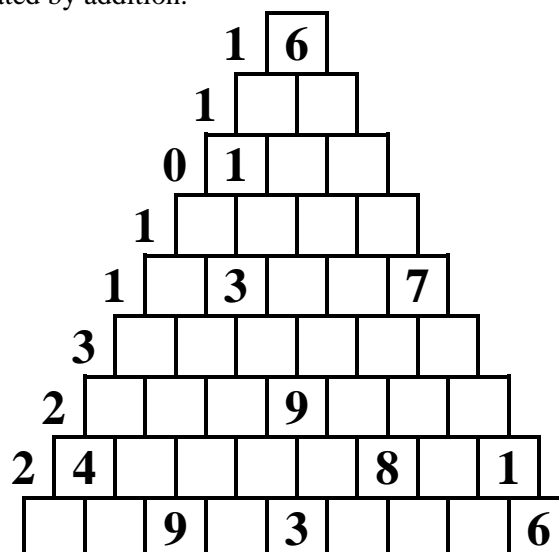
Below is a map of 8 cities (A - H). All these cities are somehow connected to each other by roads. The table below gives you the shortest paths between some of the cities using the drawn roads. All roads have a different length between 1 and 12 miles. Can you assign the lengths to the roads?



	A	B	C	D	E	F	G
H	16	18	10	14	-	-	-
G	14	17	13	-	11	12	
F	13	12	-	11	5		
E	8	-	-	-			
D	-	-	10				
C	12	-					
B	-						

### Number Pyramid (\*\*\*)

Fill the empty squares with digits (1-9) in a way that the bottom row each digit should be represented exactly once. From the second row from the bottom, each digit must be either the sum or the difference of the two digits directly below that certain digit. The numbers outside the grid show how many digits must be calculated by addition.



### Scheduling (\*\*\*)

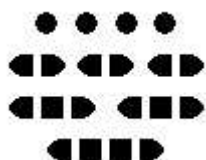
Eight teams want to play a tournament, each playing seven rounds, seven different opponents and seven different sports. Can you complete the schedule below so that each team plays every opponent, round and game exactly once? An 'X' indicates that the sport in question is not played in that round. The order of the teams is of no relevance.

	Round 1	Round 2	Round 3	Round 4	Round 5	Round 6	Round 7
Am. Football	7-			4-			
Baseball			3-7				
Basketball			2-8		3-6		
Dodge ball		X				4-	
Ice hockey	5-2	7-					
Soccer						3-2	7-1
Volleyball		4-6					

### Summed-Weight-Battleships (\*\*\*)

Place the fleet in the diagram. Ships do not touch each other, not even diagonally. The numbers give you the sum of the digits occupied by parts of a ship in the corresponding row or column.

<b>2</b>	<b>3</b>	<b>4</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>5</b>	<b>3</b>	<b>1</b>	<b>2</b>
<b>4</b>	<b>4</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>5</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>4</b>	<b>4</b>
<b>2</b>	<b>5</b>	<b>3</b>	<b>6</b>	<b>2</b>	<b>1</b>	<b>4</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>12</b>
<b>6</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>4</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>
<b>2</b>	<b>1</b>	<b>4</b>	<b>3</b>	<b>4</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>6</b>	<b>1</b>	<b>11</b>
<b>5</b>	<b>3</b>	<b>2</b>	<b>4</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>4</b>	<b>9</b>
<b>3</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>5</b>	<b>4</b>	<b>2</b>	<b>5</b>	<b>5</b>	<b>3</b>	<b>6</b>
<b>3</b>	<b>5</b>	<b>3</b>	<b>4</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>6</b>	<b>5</b>	<b>4</b>	<b>4</b>
<b>4</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>4</b>	<b>3</b>	<b>1</b>	<b>3</b>
<b>2</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>4</b>	<b>1</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>4</b>	<b>3</b>
<b>5</b>	<b>11</b>	<b>5</b>	<b>3</b>	<b>4</b>	<b>10</b>	<b>3</b>	<b>5</b>	<b>5</b>	<b>5</b>	



### The Grouping Problem (\*\*\*\*)

The 144 cells below must be divided into 18 groups of exactly eight different characters (A to H). There is only one possible solution for this problem. Can you find it?

H	H	D	B	A	B	B	A	C	F	A	B
G	F	F	E	G	F	E	D	D	C	C	A
G	E	D	C	C	G	D	F	E	E	G	E
B	D	C	B	H	B	H	H	E	E	H	H
F	E	C	A	A	E	G	G	A	H	D	B
H	A	C	A	A	F	G	C	H	B	F	G
H	B	G	A	C	D	D	F	B	G	C	D
H	D	F	C	C	E	A	B	B	C	A	D
A	F	E	G	D	F	F	H	F	C	A	F
C	E	B	F	B	B	G	A	G	E	H	D
C	G	D	H	H	E	E	H	D	C	F	F
A	G	E	D	H	E	B	G	D	A	G	B

### Fitting Strings (\*\*\*)

Place the 14 strings below in the empty diagram. The numbers indicate how many spaces are filled by characters. The character 'X' must appear in every row and column exactly once. All strings must be attached to each other through itself or other words, as in SCRABBLE. How are the strings placed?

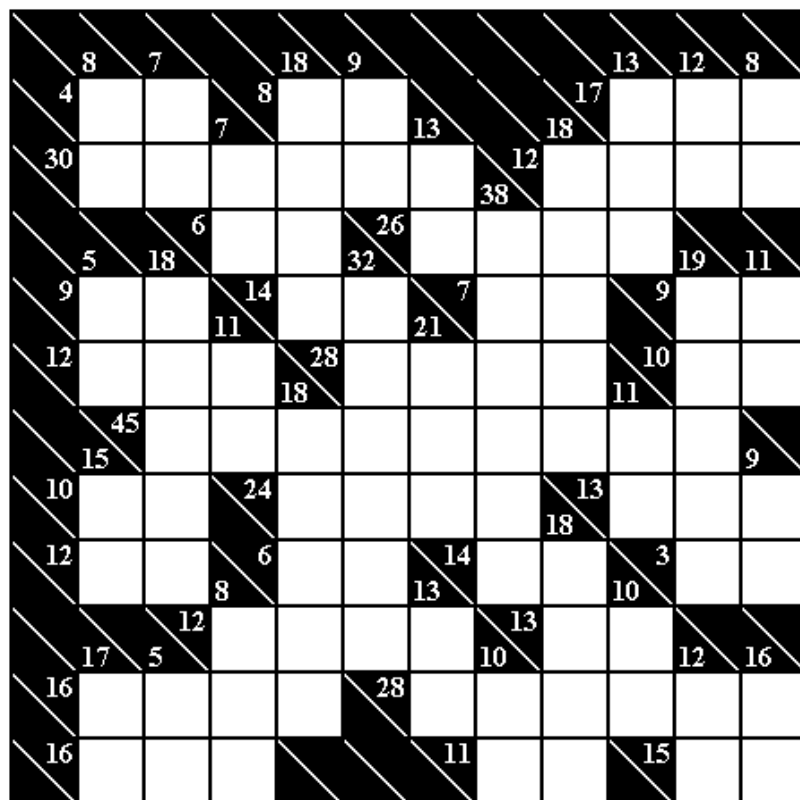
	4	9	4	5	7	3	8	4	7	4
7										
6										
7										
7										
3										
6										
5										
7										
3										
4										

BOX  
COAXKABEL  
EXACT  
EXPORT  
EXTERN  
FAX  
MAXIMA

MIX  
OXYDE  
SOLEX  
TAXI  
TEMPEX  
TEXT  
XENON

### Number crossword special (\*\*\*)

The numbers tell you the sum of the digits you ought to fill in. Every sum has to be reached by an addition of different numbers. Only the numbers from 1 to 9 are possible. So the sum '7' in 3 digits can only be constructed through the combination '1','2' and '4'. There is one extra rule. Every combination of digits can only be used once, so if 1-4 is used, then another "sum is 5 in two digits" must use the digits 2 and 3.



### All Alone (\*\*)

Black out some of the numbers in the diagram so that no row or column contain two of the same digit. Black squares must not touch horizontally or vertically. And it is not allowed to "split" the diagram with black squares. (i.e. all the white squares must be interconnected)

2	9	6	3	1	7	9	5	4
8	1	2	6	5	6	3	8	9
3	5	9	1	8	4	7	2	3
9	7	3	7	1	5	8	6	5
3	2	4	8	3	6	4	4	7
7	6	1	9	6	3	1	8	3
1	4	8	7	2	9	5	7	1
4	5	7	6	9	5	2	3	4
6	3	9	4	5	2	6	9	8