

MATHS IS PUZZLING

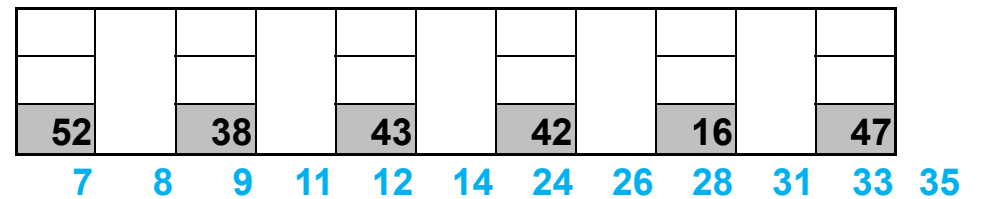
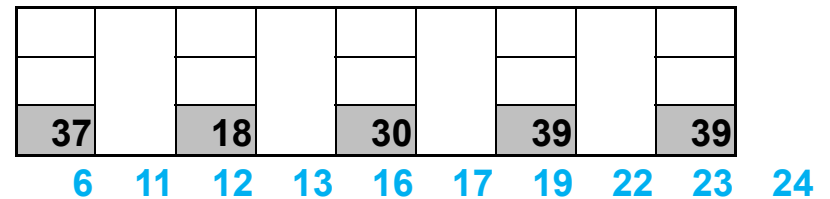
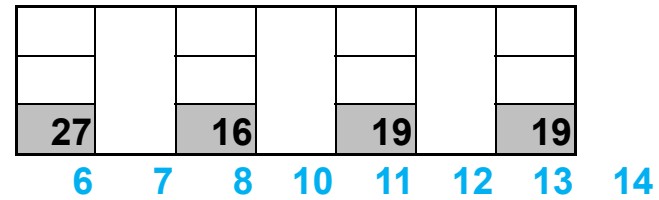
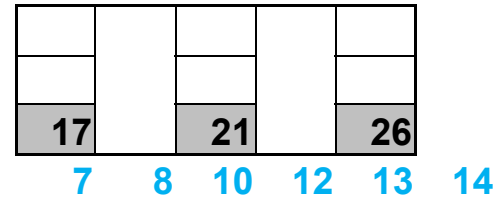
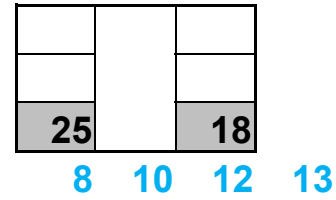
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Maths is the brain's sharpener!

ADDING PAIRS



Pair the numbers so you make the totals indicated

MAZES : ADDITION TRAILS

START	5	1	6	4
1	10	1	2	1
1	1	4	4	15

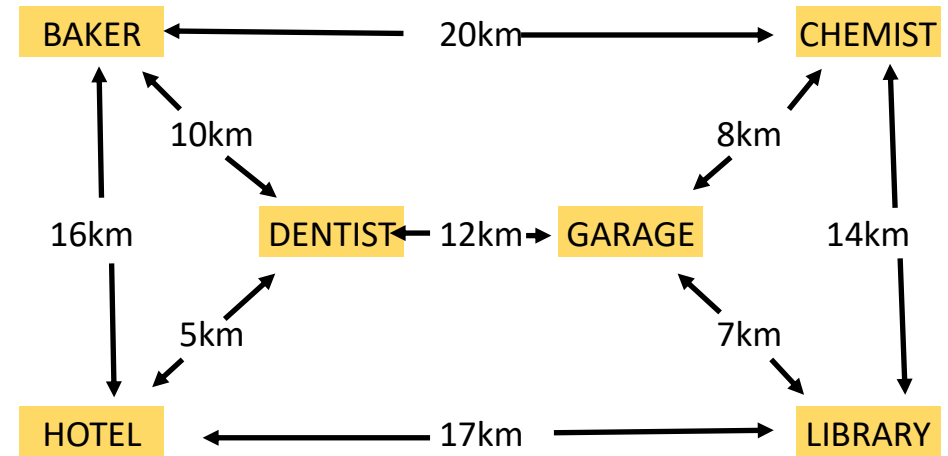
START	1	6	7	4
3	7	1	10	3
7	9	5	2	26

START	9	7	10	4
5	1	2	5	5
7	4	4	1	8
7	8	5	6	24

START	6	9	9	4
8	8	6	7	5
5	5	6	6	7
8	10	9	6	49

Work your way through the maze starting at START ending with the correct total. You can only move horizontally or vertically

CURLY'S CYCLING CIRCUIT



Curly enjoys cycling routes. Work out where the cyclist has gone on each route. Each place is only passed once.

	Route							km
Trip 1	B to L	B				L		29
Trip 2	H to G	H				G		44
Trip 3	G to D	G				D		44
Trip 4	D to H	D					H	62
Trip 5	L to C	L					C	60

MAKE 24

9 7 14 12

5 8 9 3

8 4 4 1

13 2 5 1

14 12 5 10

You have to use ALL THE VALUES to make the total 24. Only the simple operations addition, multiplication, subtraction and division.

<https://mathsweekengland.co.uk>

PAGE NUMBERS

If you have 12 pages in a booklet you will have 15 digits, that is:

$$1-2-3-4-5-6-7-8-9-1-0-1-1-1-2 = 15 \text{ digits}$$

If you have 21 digits the number of pages will be 15:

$$1-2-3-4-5-6-7-8-9-1-0-1-1-1-2-1-3-1-4-1-5 = 21 \text{ digits}$$

21 digits / 15 pages

A

How many pages will a booklet have if the page numbers are made up of 25 digits altogether?

B

In my book I counted 20 pages - how many digits will there be?

C

How many pages will a booklet have if the page numbers are made up of 53 digits altogether?

D

In my book I counted 89 pages - how many digits will there be?

E

How many pages will a book have if the page numbers are made up of 190 digits altogether?

SYMBOLS WITH VALUES

A

	+		+		+		+		=	10
	+		+		+		+		=	9
	+		+		+		+		=	??

B

	+		+		+		+		=	11
	+		+		+		+		=	7
	+		+		+		+		=	14
	+		+		+		+		=	??

C

	+		+		+		+		=	11
	+		+		+		+		=	9
	+		+		+		+		=	10
	+		+		+		+		=	??

D

	+		+		+		=	11		
	+		+		+		+		=	17
	+		+		+		+		=	19
	+		+		+		+		=	??

Look at each grid and work out what is the final total.

FILL IT IN

		9	3	1	9		

Place the values below into the grid so all the numbers fit.

69	427	816	964	7192
78	431	878	1523	7643
192	496	894	2789	9319
366	499	923	4614	9797
416	762	952	6766	

CALCULATING SNAKES-

1	→	x4		6	→	x2½		3	→	x3	
			↓				↓				↓
			+5				x4				x4
	←	-4			←	x3			←	x2	
	↓				↓				↓		
	x6				÷6				÷12		
	→	÷3			→	÷3			→	x9	
7	→	x4									
			↓								
			+5								
	←	x4									
	↓										
	÷6										
	→	+28									
			↓								
			9								

Follow arrows to find the values of each snake. Try and do the calculations without writing anything down until you get to the answer.

ORDERING CARDS

By reading through the instructions put the numbers in the correct order. Using playing cards or numbered cards will make it easier to solve.

None of the numbers are in their actual positions. 1 cannot be the first card, 2 cannot be the second card and so on.

- A** **1 2 3**
- The even number is left of 3.
- B** **1 2 3 4**
- The first and fourth numbers add up to 6.
- C** **1 2 3 4 5**
- The sum of the first and last numbers add up to 7.
 - The three prime numbers are next to each other.
 - The three middle numbers add up to eight.
 - The 1 is to the left and two places away from 2.
- D** **1 2 3 4 5**
- No odd numbers are next to each other.
 - The difference between the first and last numbers is two.
 - 1 is on the right hand side of 4.
- E** **1 2 3 4 5 6 7**
- The first and last cards add up to the same value of the second and fourth numbers..
 - Three of the odd numbers are next to each other.
 - The second and sixth numbers add up to 10.
 - 1 is to the left of 5 but right of 3.
 - 4 is four places away from 6.

TOTAL IS 7

3	3	2	3	2	3	1	2	3	1
2	2	3	2	1	2	1	1	3	3
2	3	1	3	2	3	3	3	2	2
1	3	2	2	3	3	1	1	3	2
2	2	2	3	2	1	2	3	2	3
2	3	2	1	2	1	2	1	2	3
3	2	2	1	2	1	3	1	1	2
3	1	3	3	2	1	1	3	1	2
3	2	2	1	3	3	1	1	2	3
1	3	1	3	3	1	2	1	1	3

SOLUTIONS

CURLY = BDG / HBCG / GCLHD / DBCGLH / LGDHBC

SNAKES = 10 / 10 / 54 / 15

CARDS = 231 / 4312 / 41523 / 54123 / 6751432

SYMBOLS = 8 / 11 / 5 / 19

PAGE NUMBERS = 17 / 31 / 31 / 169 / 100

ADDING PAIRS = (12 13) (8 10) / (7 10) (8 13) (12 14) / (13 14) (6 10) (7 12) (8 11) / (13 24) (6 12) (11 19) (16 23) (17 22) / (24 28) (12 26) (8 35) (11 31) (7 9) (14 33)

Circle consecutive numbers which add up to 7. They can be horizontal, vertical or diagonal.