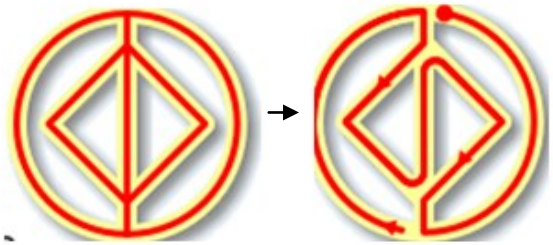
A Superhero Christmaths -instructions

This year's competition will begin on Wednesday 8th December. On each of 3 days there will be a main problem plus 3 other tasks as explained below. Once again there are fantastic prizes to be won.
Please see your Maths teacher for further details..

UNICURSAL DIAGRAMS

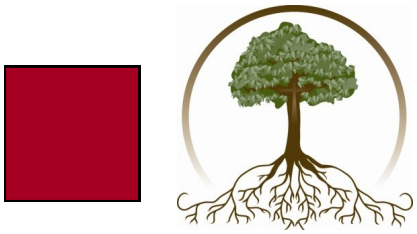
Simply say if each of the diagrams - A,B and C - can be drawn without lifting your pencil off the paper or going over the same line twice.
You should write down which are possible as your answer each day.
This answer maybe one, two or all of them or even none of them.



DINGBATS

Try to work out which Mathematical word/ term/topic is represented by the pictures/ symbols.

For example...

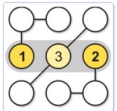


….could be SQUARE ROOTS

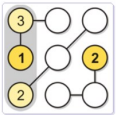
STRIMKO

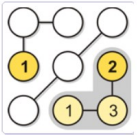
The Object is to fill in the grid with missing numbers observing 3 simple rules. You have numbers 1 to 3 for a 3x3 grid, 1 to 4 for a 4x4 grid and so on.

The 3 simple rules are
1. Each row must contain different numbers.



2. Each column must contain different numbers.





3. Each stream of connected circles must contain different numbers.