## October 2022 challenges

## Challenge One

Items of fruit are sold singularly in a supermarket. From the information below can you list the seven fruits in order of price, starting with the most expensive?

A banana costs less than a peach but more than a pear, a kiwi costs less than a pear and more than an apple, a pineapple is more expensive than a peach and a lemon costs more than a kiwi but less than a pear.

## Challenge Two

You have 25 sticks standing upright in a circle, numbered 1 to 25 . Starting with stick \#3 and then rotating in a clockwise (CW) direction around the circle, knock over every other or second stick in each rotation of the circle (i.e., \#4, \#6, \#8, etc). Keep rotating around and around the circle knocking over every second stick standing until only one stick remains standing. What will be the number of the last stick standing?

## Challenge Three

The empty boxes contain any of the number 1-9, and no empty box contains the same number as another empty box.


The three numbers in cells D1-3 equal the value of the top row minus the bottom two rows' values.

The three numbers in $\mathrm{A} 4, \mathrm{~B} 4$ and C 4 equal the value of the left most column minus the values of the other two columns

The same principle applies to the diagonal from A1 to D4

Solve the puzzle by finding all of the missing numbers that satisfy all of the results as shown.

