Maths Challenge – Week 57

Welcome to week 57 of our weekly maths challenge, with problems and puzzles posed by Gordon Burgin, Andrew Holt, Rod Marshall, Ian Stewart and the U3A Maths and Stats Subject Adviser - David Martin.

If you would like to share your ideas on how to solve these puzzles please join our learning forum or discuss within your U3A and interest group. **Check back each week for the solutions** and let us know how you get on by contacting u3a office. New maths puzzles will go up onto the website every Thursday.

Week Fifty-seven

Question 1.

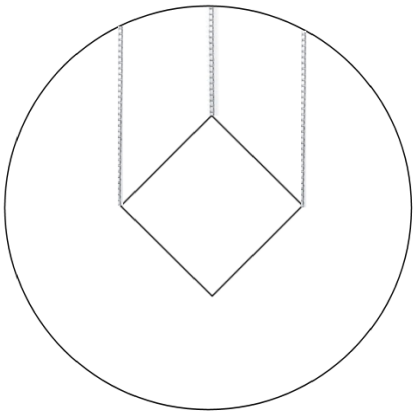
Find three integers whose sum is 180 such that the first integer is three times the second integer and six times the third integer.

Question 2.

Mary is eight years older than John, and in exactly a year she will be twice his age. How old are they now?

Question 3.

A circular window has a square decoration hanging at its centre, supported by three thin chains:



The middle chain is 4” long and the two outer chains are each 6” long. How long is the side of the decoration?

Question 4.

Adding a two-digit number to its reverse (i.e., the two-digit number with the order of the digits reversed) gives a perfect square; and subtracting its reverse from the original two-digit number also gives a perfect square. What is the original two-digit number?