Welcome to this week's Maths Challenge!

Everyone is encouraged to take part.

There are 3 to 5 merit points for correct solutions, depending on the difficulty of the problem and how impressed the marker is with your solution.

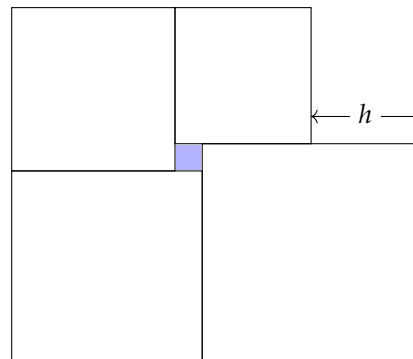There are house points for students who submit 7 or more correct solutions in one term.

Solutions must be explained in detail, responses with just the answer may be ignored.

Drop your solution in the box in the staffroom by Tuesday.

Year 8 and below

Five squares are positioned as shown. The smallest, shaded square has an area of 1 cm^2.
What is the value of h?

Year 9 and above

The numbers $4x$, $2x - 3$ and $4x - 3$ are consecutive terms in a linear sequence. Find the value of x.