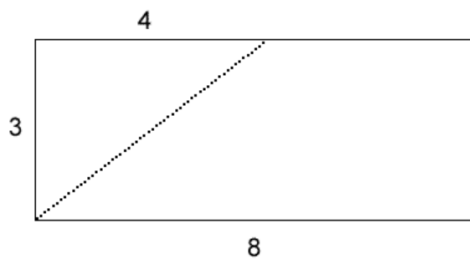**Problem of the Week: Week 1 (Sum1): Year 9: Geometry**

• Apply angle facts, triangle congruence, similarity and properties of quadrilaterals to derive results about angles and sides, including Pythagoras' Theorem, and use known results to obtain simple proofs
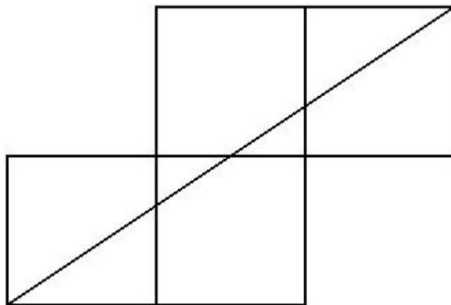
Rectangle rearrangement

A 3 x 8 rectangle is cut into two pieces along the dotted line shown. The two pieces are then rearranged to form a right-angled triangle. What is the perimeter of the triangle formed?

https://nrich.maths.org/5701

Tetromino Diagonal

Four unit (1 by 1) squares are placed edge to edge as shown. What is the length of the diagonal line drawn?

https://nrich.maths.org/6767