



Problem Solving Shape and Space

Imagine a square with its diagonals drawn in.
Remove one of the triangles.
What shape is left?
How do you know?

Imagine a rectangle with both diagonals drawn.
Remove a triangle.
What sort of triangle is it? Why?

Imagine joining adjacent mid-points of the sides of a square.
What shape is formed by the new lines?
Draw it.

Imagine a square with one of its corners cut off.
What different shapes could you have left?
Draw them.

Imagine an isosceles triangle.
Fold along the line of symmetry.
What angles can you see in the folded shape?
Explain why.

Imagine a square sheet of paper. Fold it in half and then half again, to get another smaller square.
Which vertex of the smaller square is the centre of the original square?
Imagine a small triangle cut off this corner. Then imagine the paper opened out.
What shape will the hole be?
Explain your reasoning.