

Fractional Triangles

Use the lines on this figure to show how the pattern of triangles can be used to divide the square into two halves, three thirds, six sixths and nine ninths.

More lines are needed to divide it into four quarters.

What is the least amount of line needed to do this if the quarters are in one piece and all the same shape?

How many ways can you divide it into halves using just the lines given?

You might like to try out your ideas. Print off copies of the triangle above or use the NRICH website <https://nrich.maths.org/2124> to try them out using interactive grid. Click on a dot to choose a colour, then click on a triangle.

