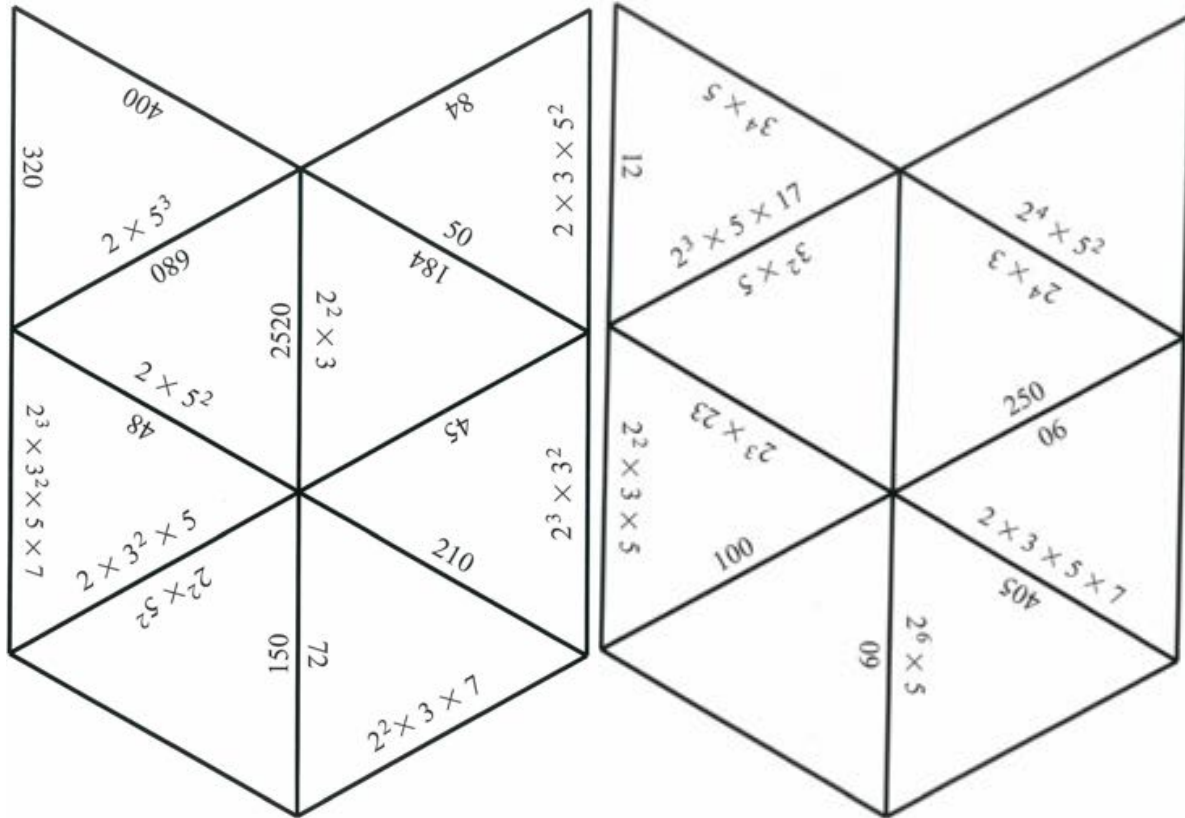# POWER MATCHING

Cut out the 16 small triangles. Arrange the 16 pieces into a larger triangle so that the numbers on matching edges are the same, for example $2^2 \times 3 \times 7 = 84$

HELP

If you are struggling, that's OK. You just need to keep trying.

Read the instructions. Look for the piece that has 84 on an edge and the piece that has $2^2 \times 3 \times 7$ on an edge and put them together.

That's two pieces out of 16, you are on your way.

You are trying to make one big triangle and it won't have any numbers on the outer edge. A good strategy would be to sort out the pieces that have numbers on one edge only, then the pieces with numbers on 2 edges and then the pieces with numbers on 3 edges.

Where do you think the pieces go that only have numbers on one edge? They can only touch one other triangular piece.

What about the pieces with numbers on 2 edges? Where do they go?

Now look for $2^2 \times 3 \times 5$ and calculate it's value. Find the piece with that number on the edge and put the matching edges together. Then work out $2^3 \times 23$ and look for the next piece.

NEXT

If you have finished this puzzle then make up your own similar puzzle, perhaps with 4 triangles or 9 triangles. You could then exchange your puzzle with another learner so you both solve each other's puzzles.