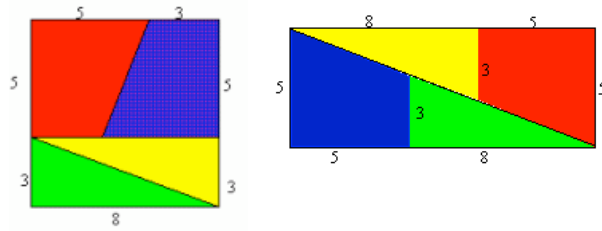


DOESN'T ADD UP



Look at this square divided into four pieces:
two identical triangles and two identical trapezia.

The square has edges of length 8 units and area 64 square units.

The edge of length 3 from each triangle matches with the edge of length 3 from a trapezium so that the four pieces from the square now occupy a rectangular space.

The area of the rectangle is 65 square units (13 by 5)

Can the area have changed? Can you explain what has happened?

HELP

Draw the 4 pieces accurately, measuring the right angles carefully or use squared paper.

Now make both arrangements with your 4 pieces.

Look carefully. Can you explain what happens? Are you sure about it?

NEXT

Can you make up your own similar problem?

Another set of dimensions are 4, 7, 11 in the corresponding places of 3, 5, 8.

The areas are 121 square units compared to 126 square units.

Draw these pieces and the two arrangements.

