

SMILE WORKCARDS

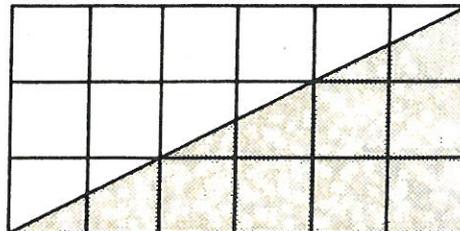
Shape Pack One

Contents

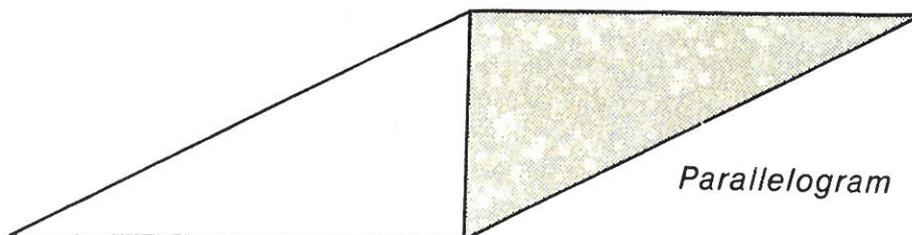
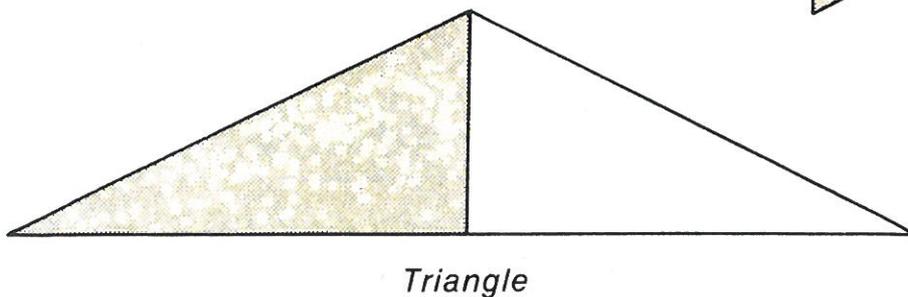
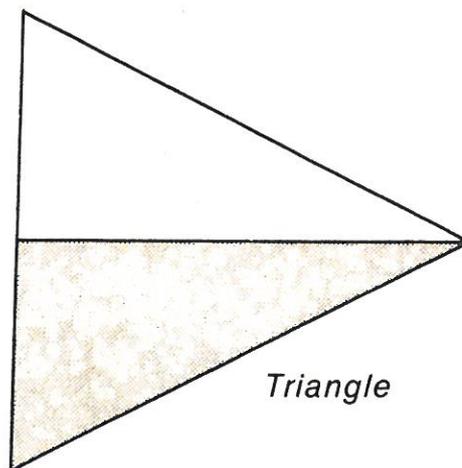
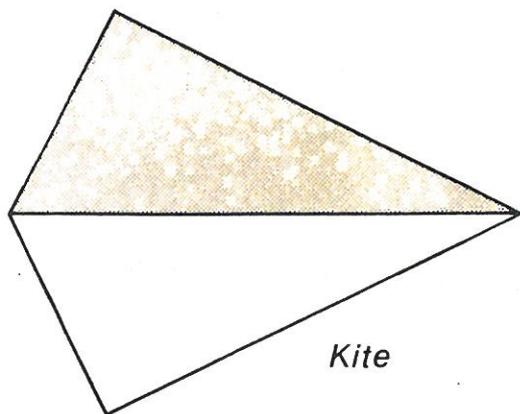
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Cutting up Rectangles

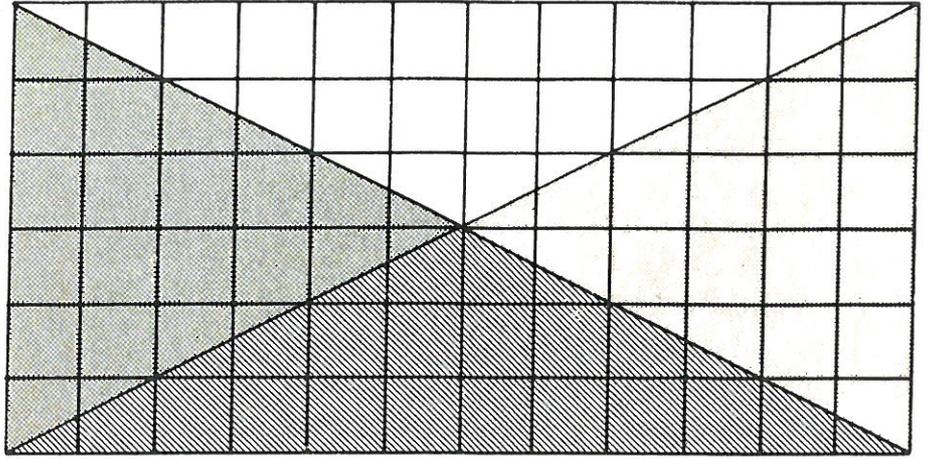
1) Draw and colour 4 rectangles like this:



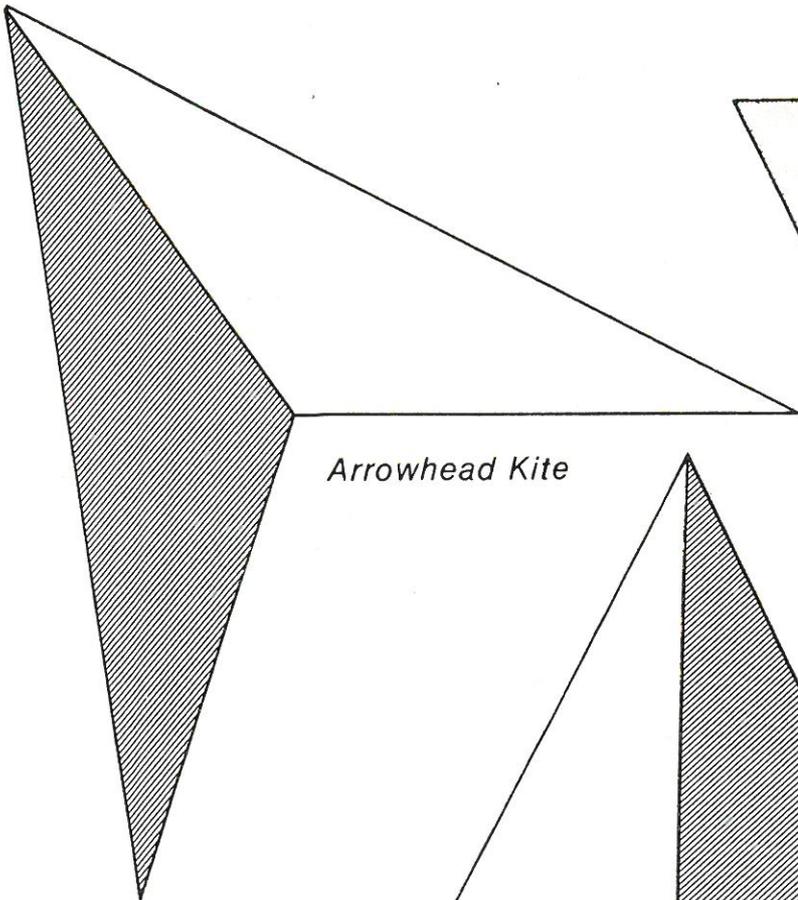
2) Cut each rectangle into 2 triangles.
Use the triangles to make the shapes below.
Stick them in your book.



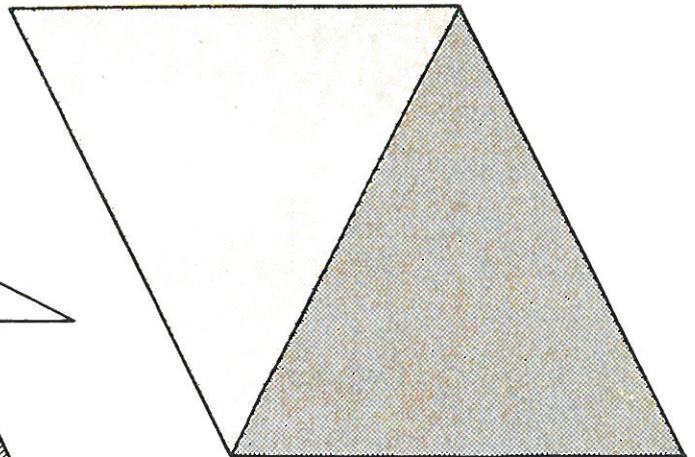
3) Draw and colour
2 rectangles like this:



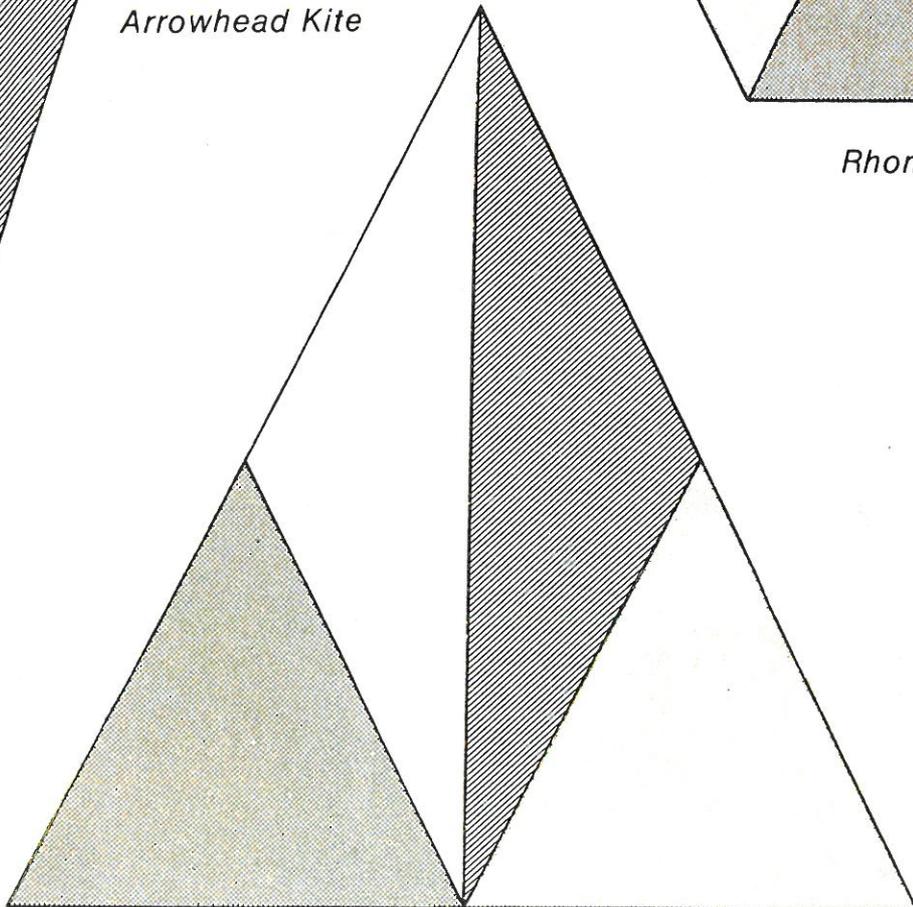
4) Use them to make the shapes below.
Stick them in your book.



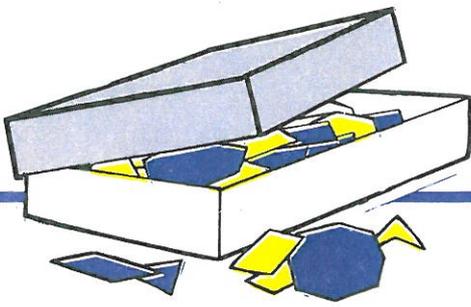
Arrowhead Kite



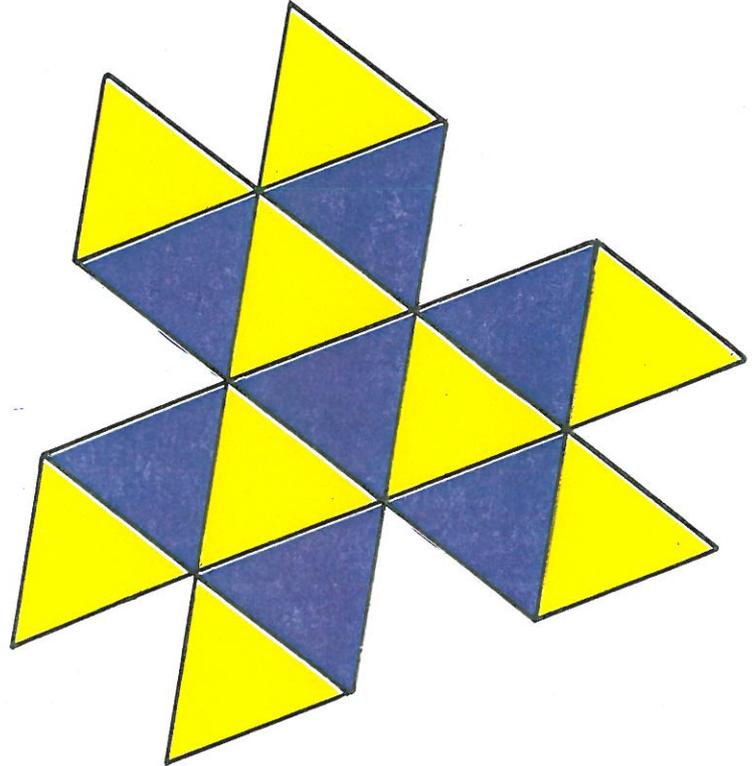
Rhombus



Triangle

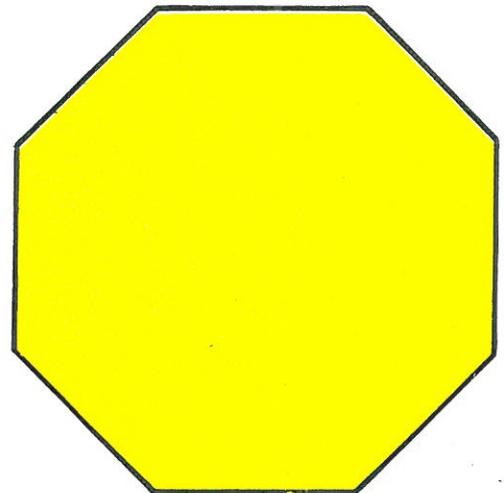


You will need the box of tessellation shapes.



1) Can you make this pattern?

2) Make patterns with these shapes

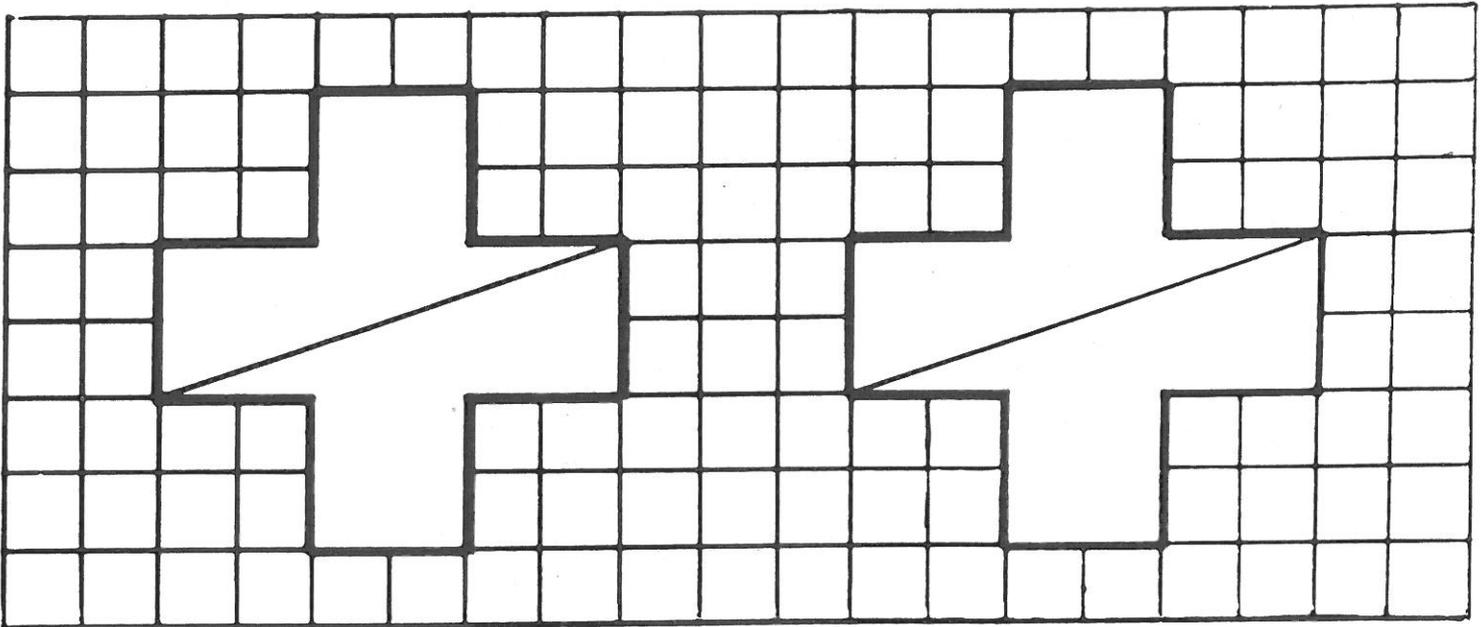


3) Make some patterns of your own. Use the other shapes in the box.

4) Try drawing one of your patterns — draw around the shapes.

You will need: cm. squared paper, colours, scissors, glue

Dissection 1



Draw these 2 crosses on squared paper.

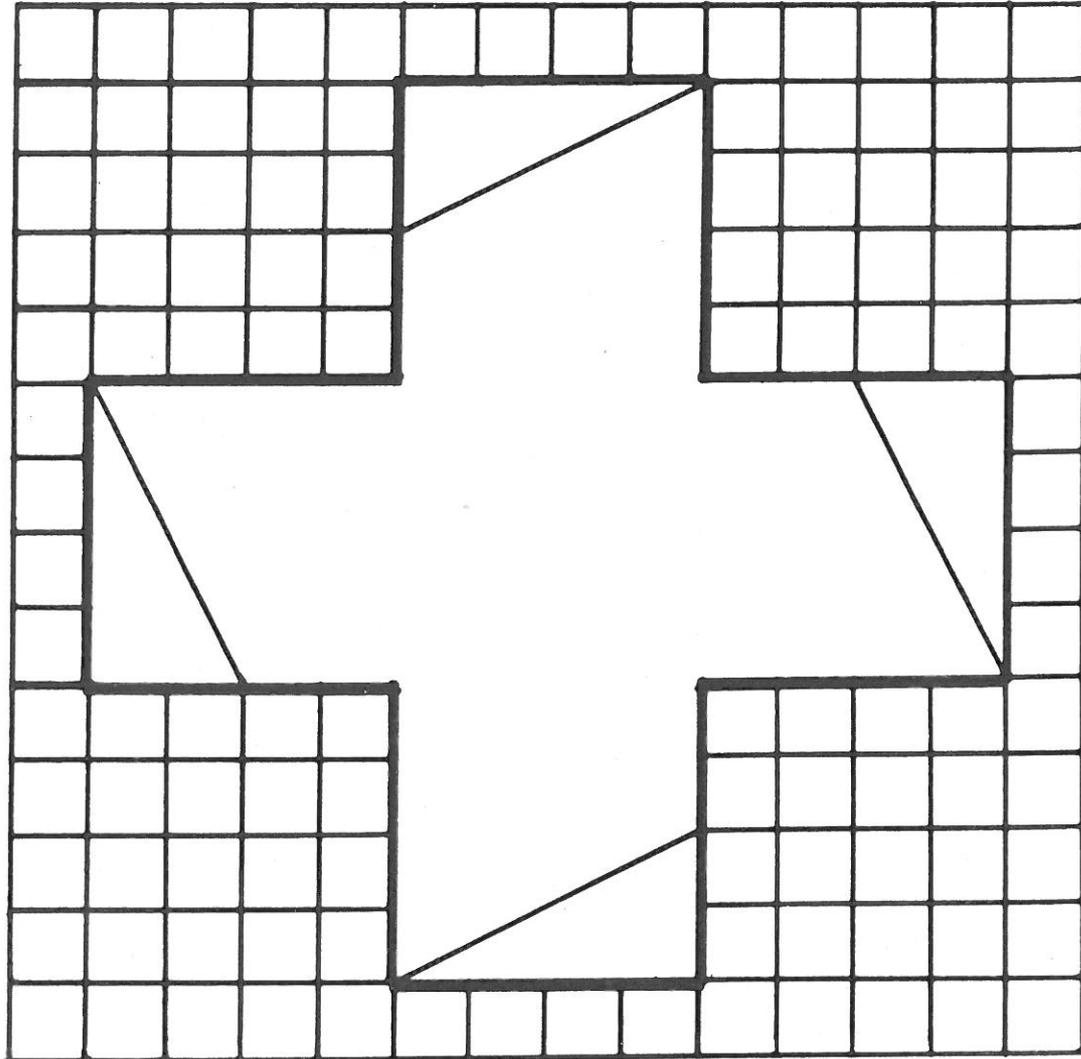
Draw a line from corner to corner.

Colour the two parts of each cross.

Cut out the four coloured pieces.

Try to fit the 4 pieces together to make a SQUARE.

Stick them in your book.



Draw the cross on squared paper.

Colour it, using 2 colours.

Cut out the cross.

Cut off the corners.

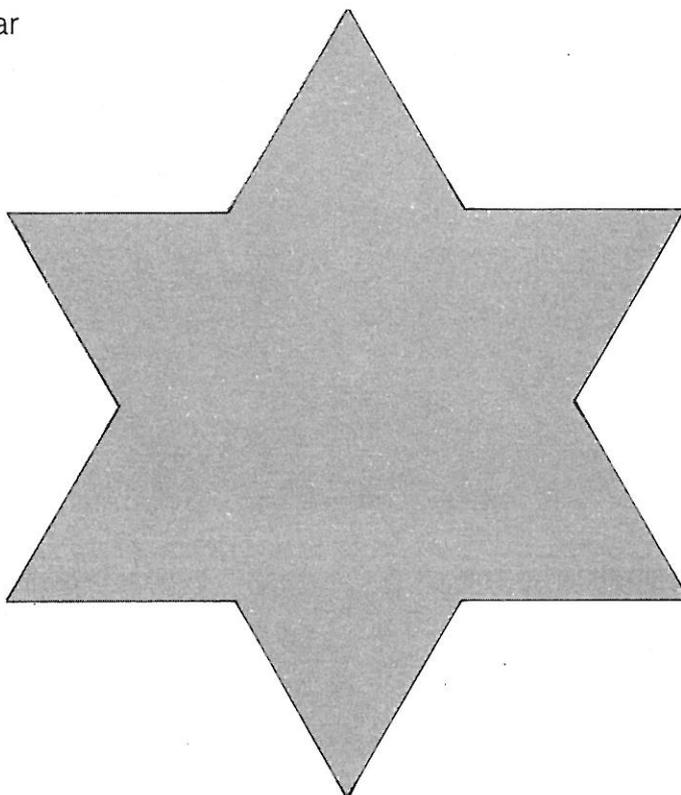
Stick the large piece in your book.

Try to fit the corner pieces around the large piece to make
a SQUARE.

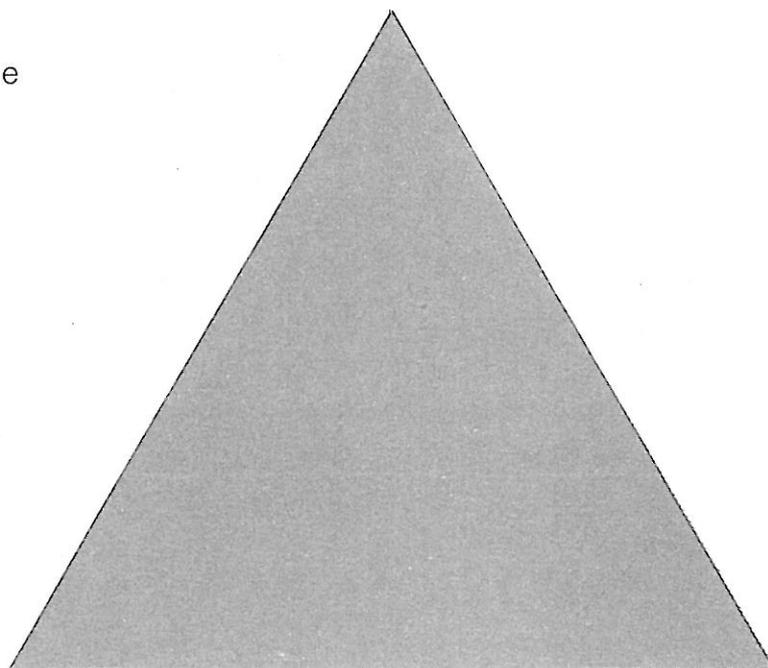
Fitting

You will need triangles, kites and arrowheads from **1700A**.

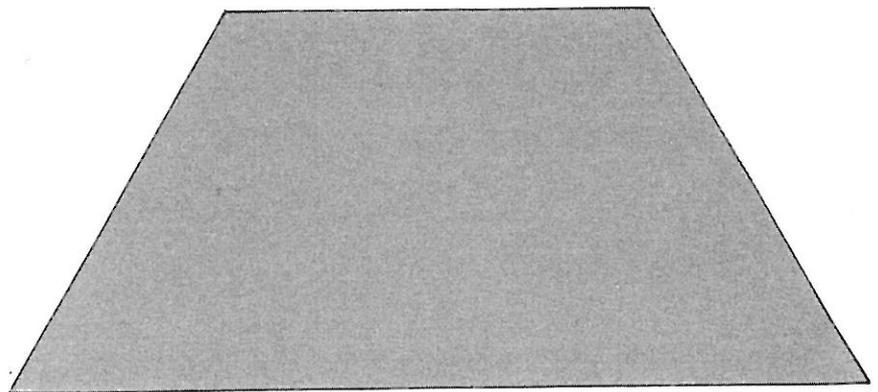
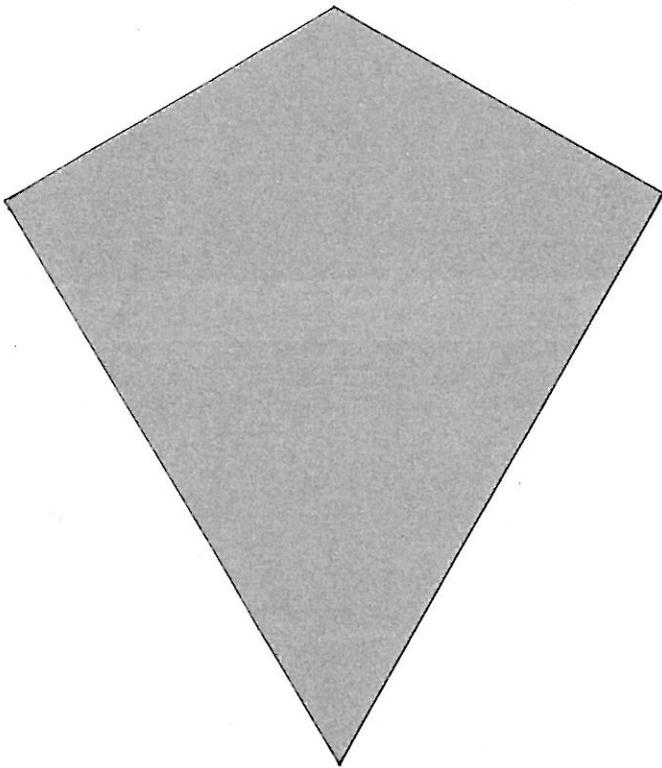
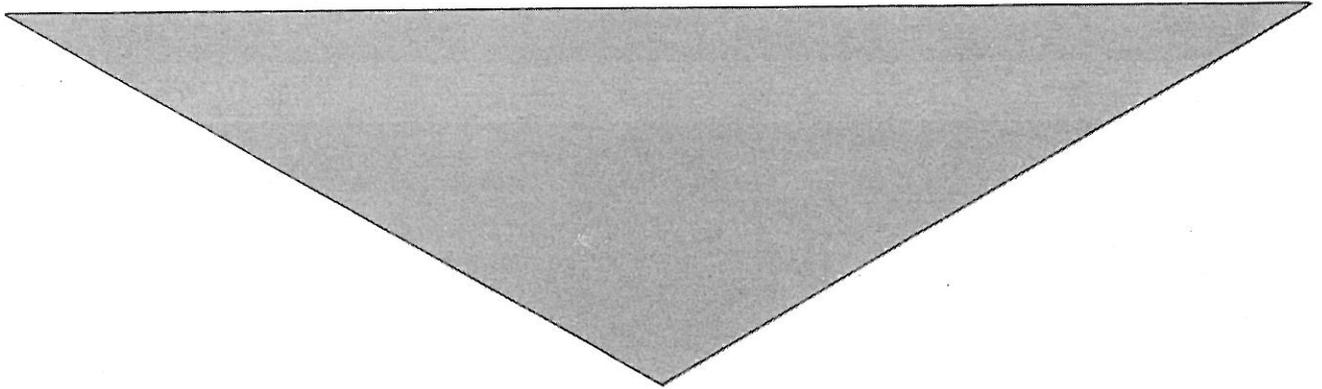
Fit 6 arrowheads on the star



Fit 3 kites on this triangle

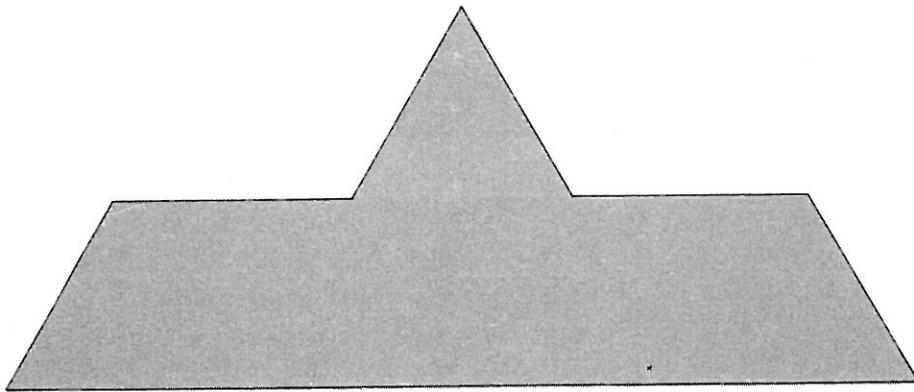


Try to make each of these with *2 kites and 2 triangles*

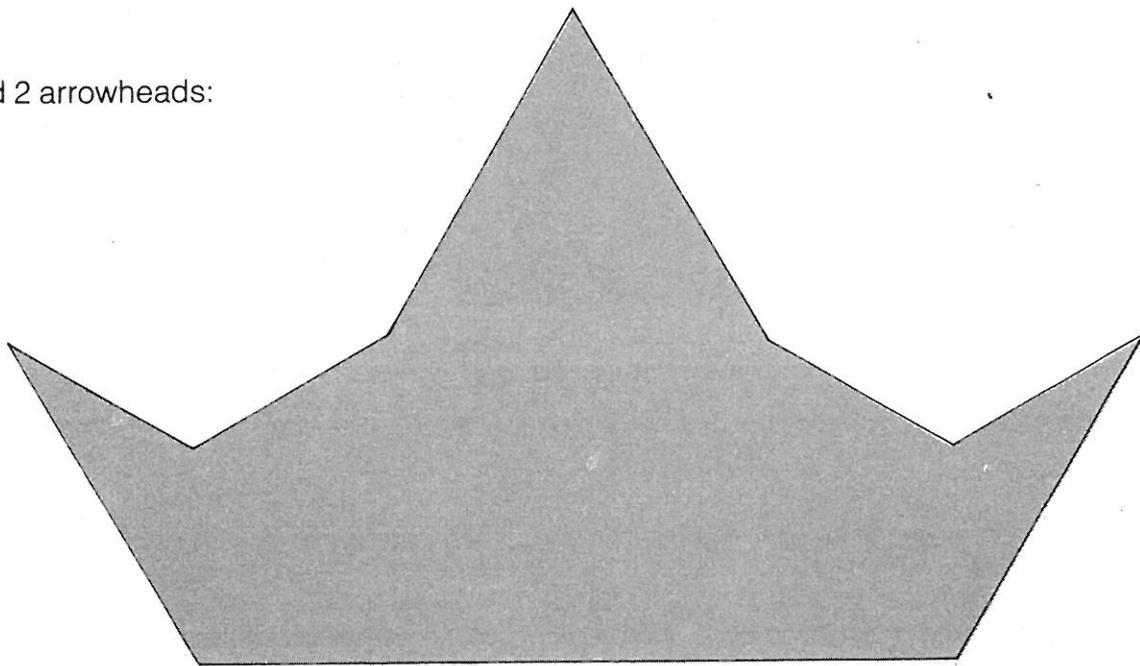


Make a shape of your own. *Try it on a friend*

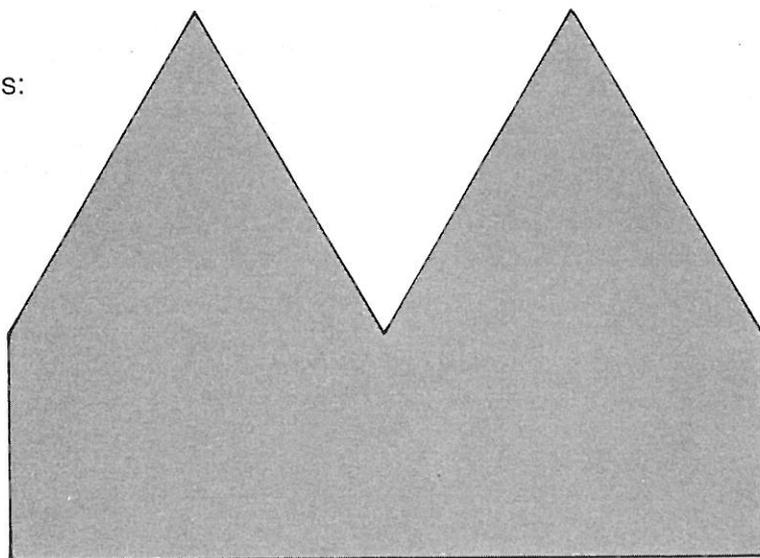
2 arrowheads and 2 triangles:



3 kites and 2 arrowheads:

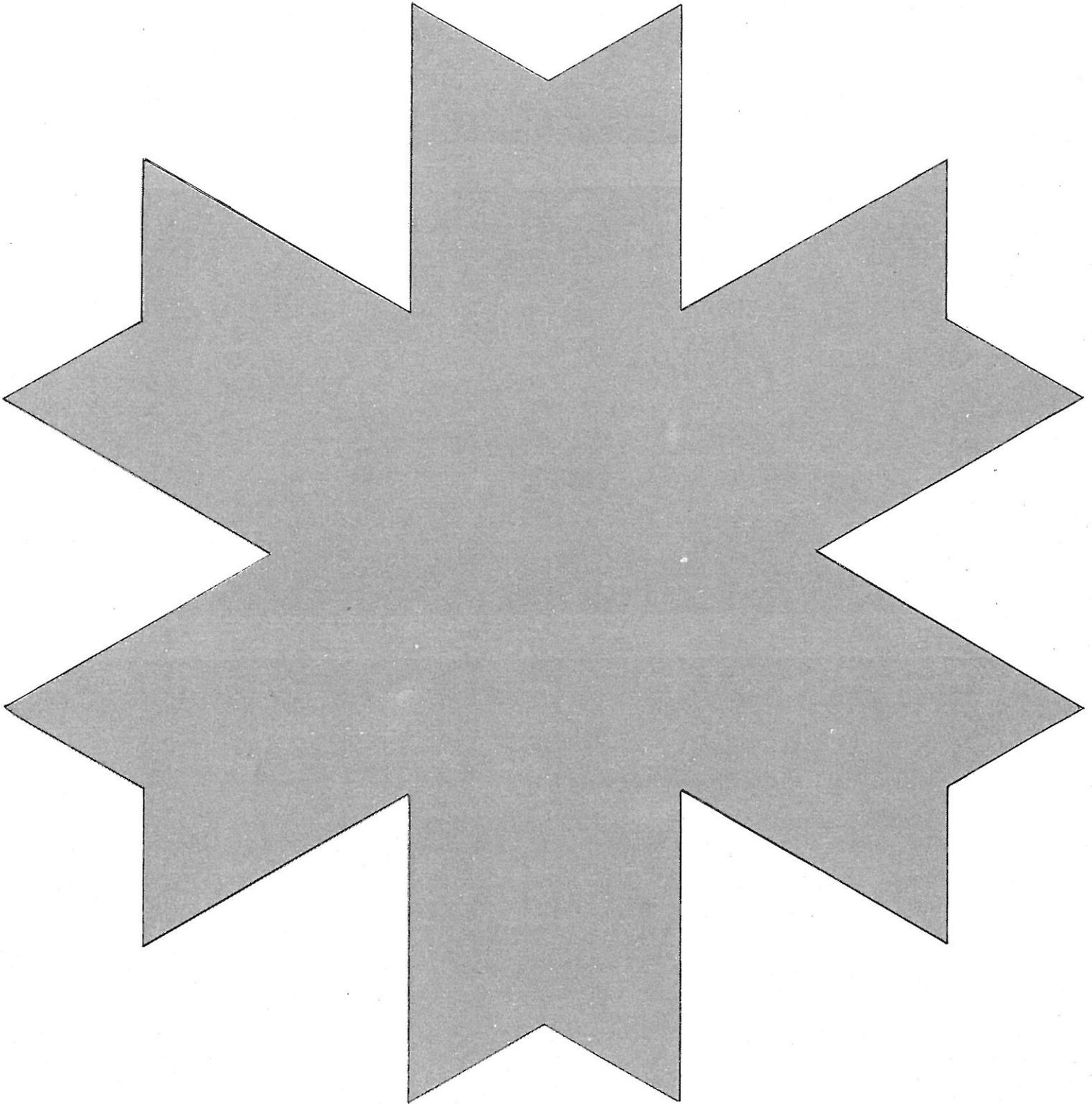


3 arrowheads and 2 kites:



● If you are ready for a challenge, *turn over!*

This one is more difficult!

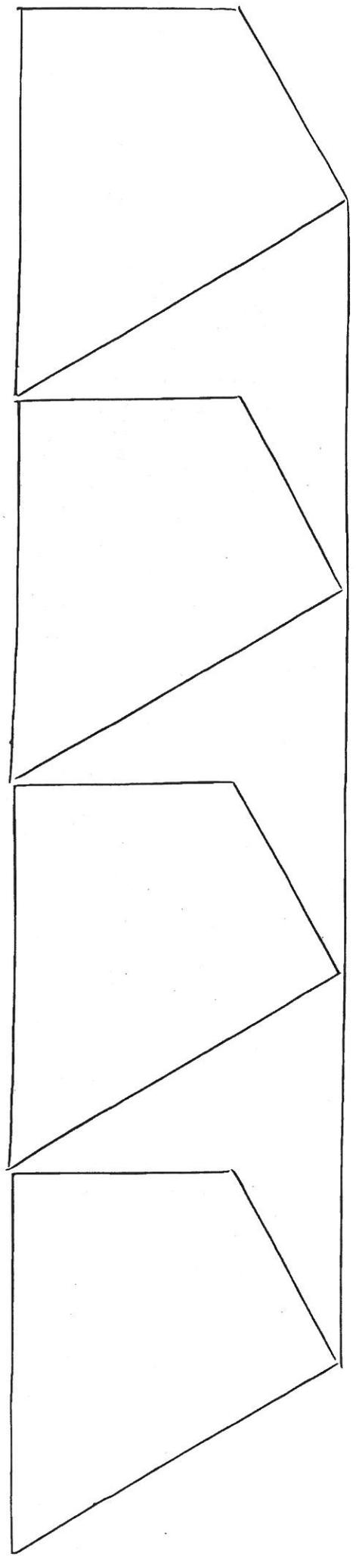
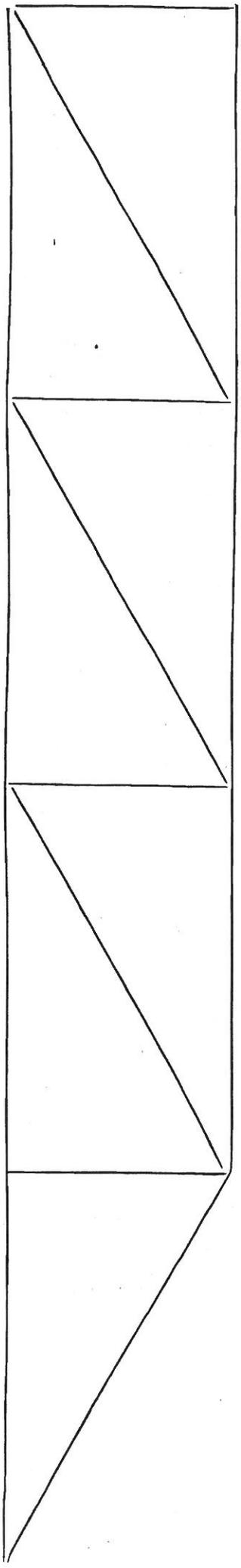
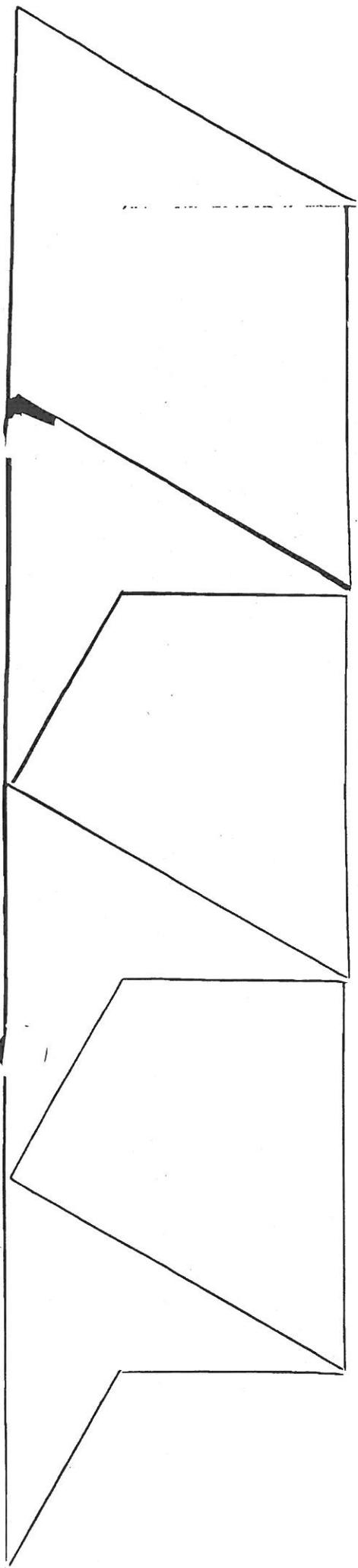


HINT

This can be done using:
6 arrowheads
6 kites and
12 triangles

but there is more than
one way to do it!!!

What other star-shapes can you make?



Smile 1700A

Fitting

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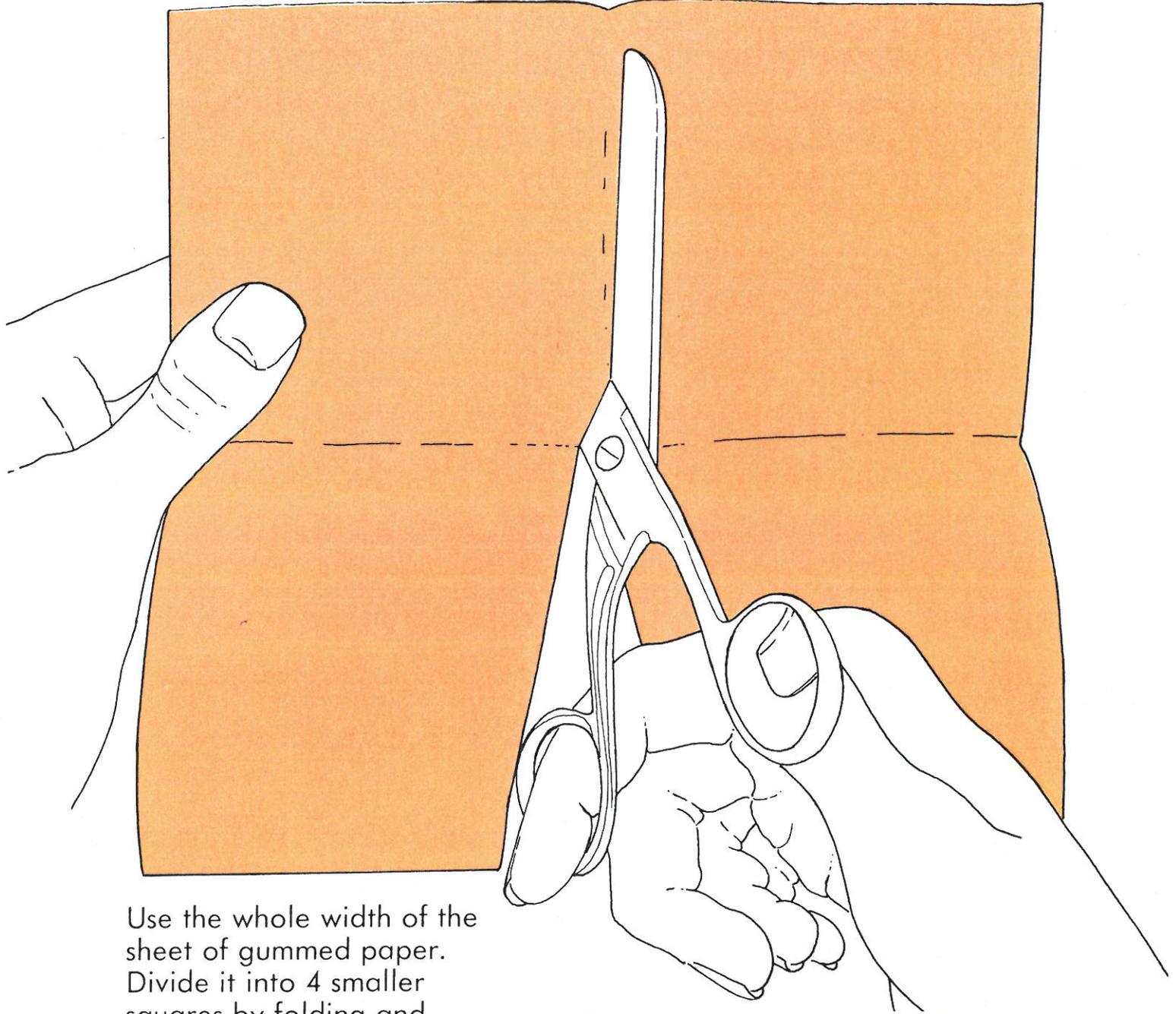
20 triangles

20 kites

20 arrowheads

Squares and Triangles

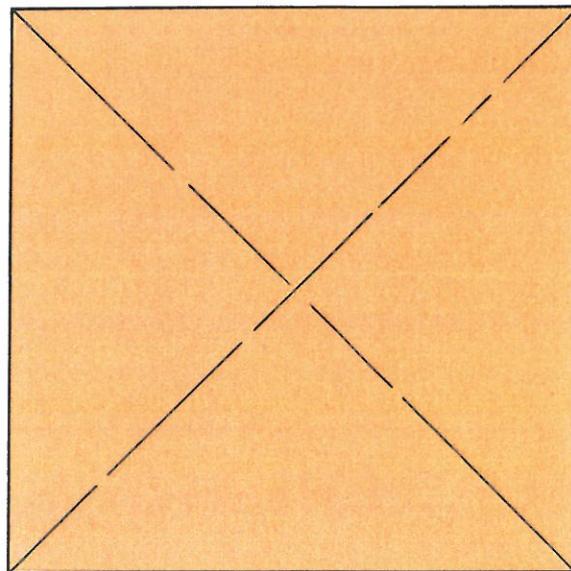
You will need a coloured gummed square and scissors.



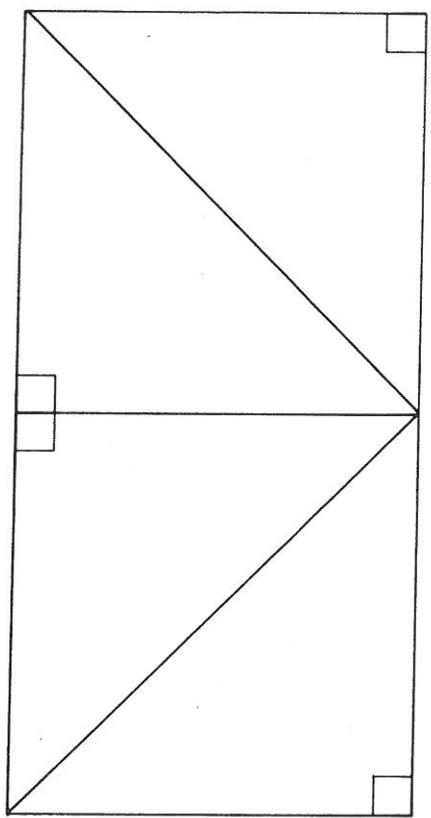
Use the whole width of the sheet of gummed paper. Divide it into 4 smaller squares by folding and cutting.

Divide each small square into four triangles by folding and cutting.

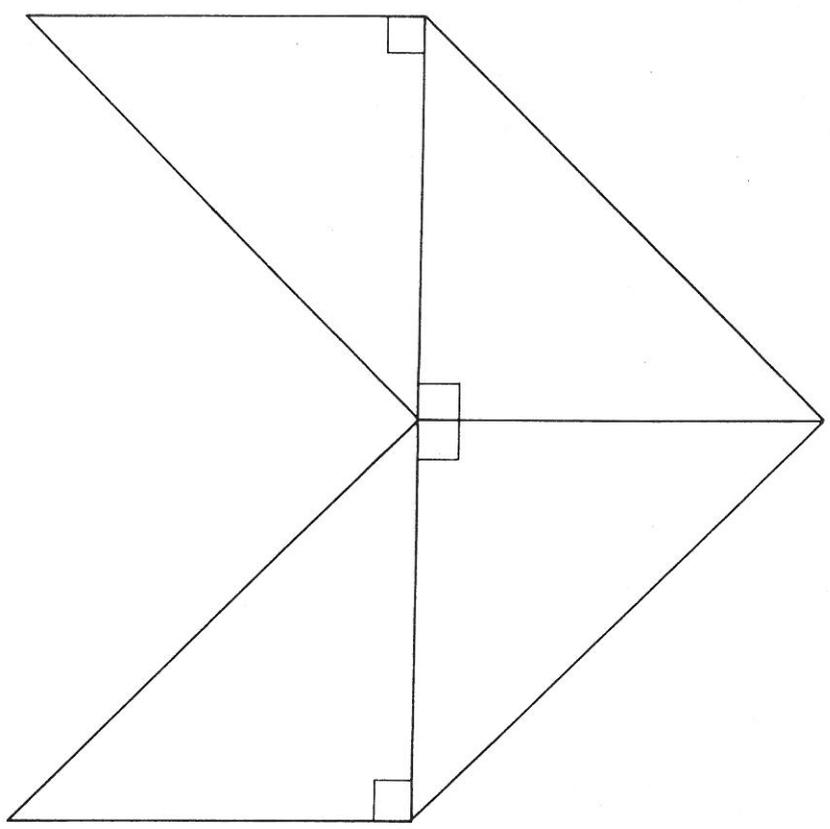
On each of these triangles one corner is a right angle. You should have 16 right-angled triangles, all the same size and shape.



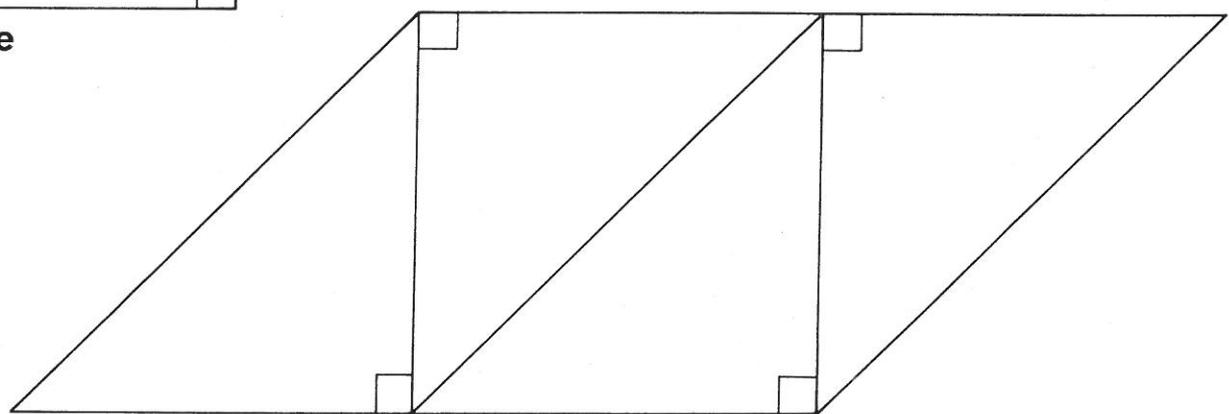
Use the right-angled triangles to make the following shapes. Stick them in your book. Mark the right angles (as shown) and name the shapes.



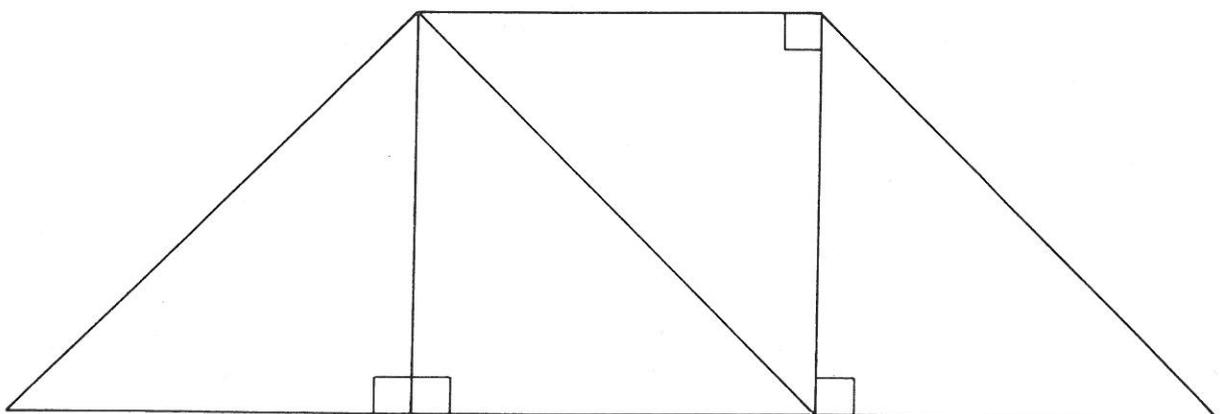
Rectangle



Chevron



Parallelogram

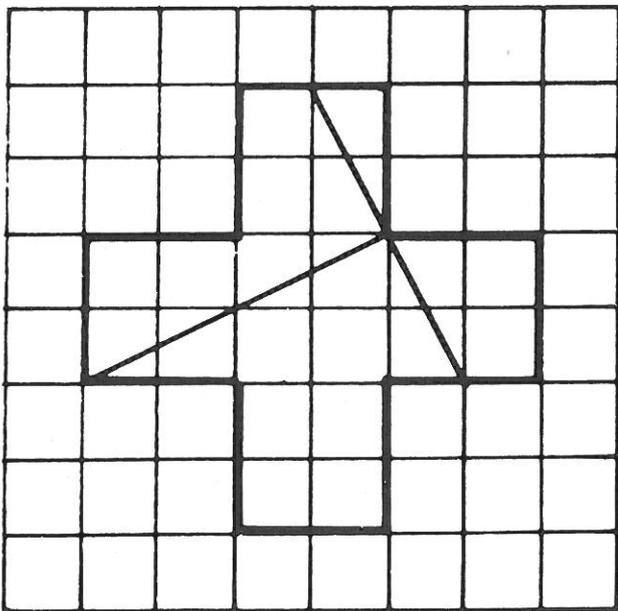
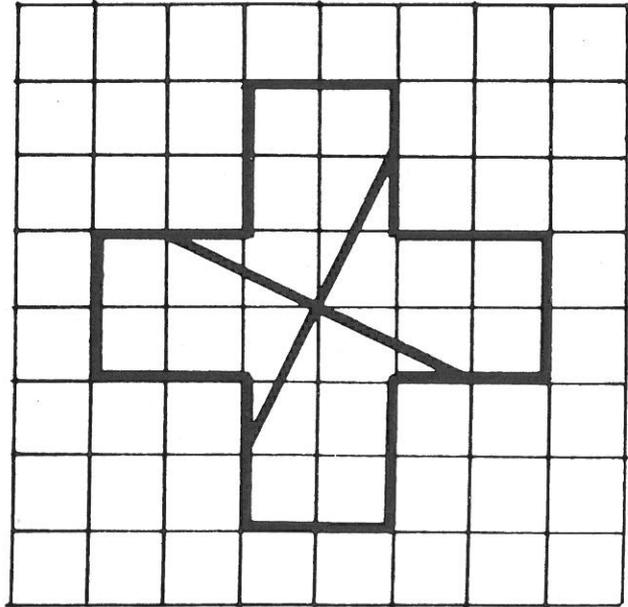


Trapezium

You will need: cm. squared paper, scissors, glue

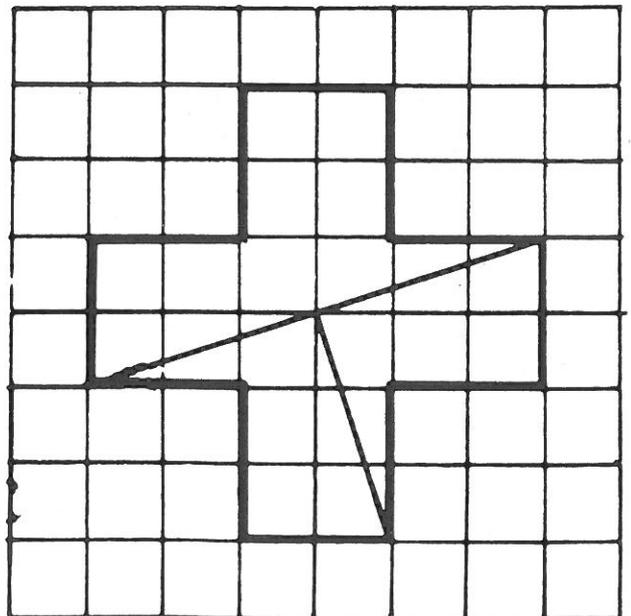
Dissection 2

Draw a Greek cross.
 Draw the 2 lines shown.
 Colour it.
 Cut it out.
 Make the 4 pieces into a square
 and paste it into your book.



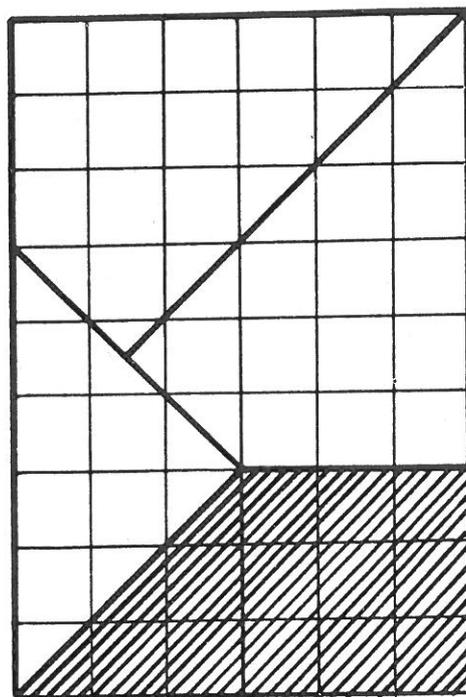
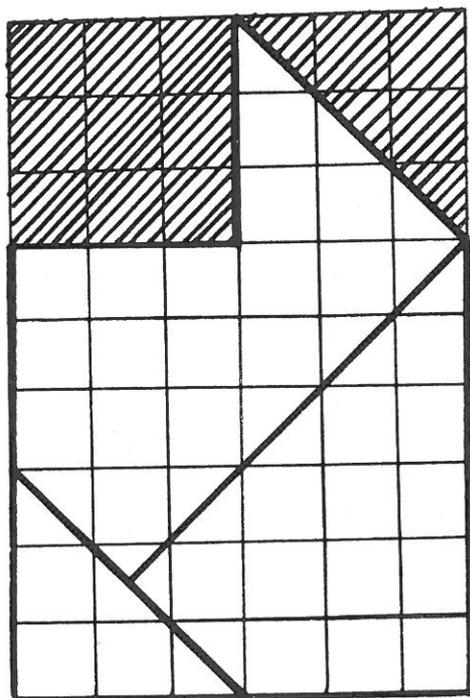
These 4 pieces will also make
 a square.
 Draw them, cut them out, make a
 square and stick it in your book.

Try it again with
 these 3 pieces.
 This time you should
 make a rectangle.



You will need: cm. squared paper, scissors, glue

Dissection 3



In each of these, the 3 unshaded pieces will make a square.

Draw them, cut them out, make the squares and stick them in your book.

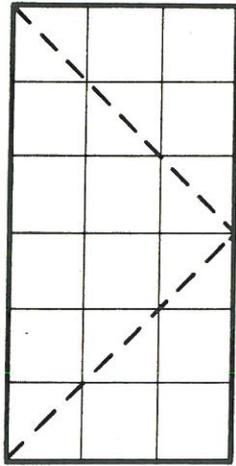
The three shaded pieces should make a rectangle.

You will need squared paper,
scissors and glue

Smile 0053

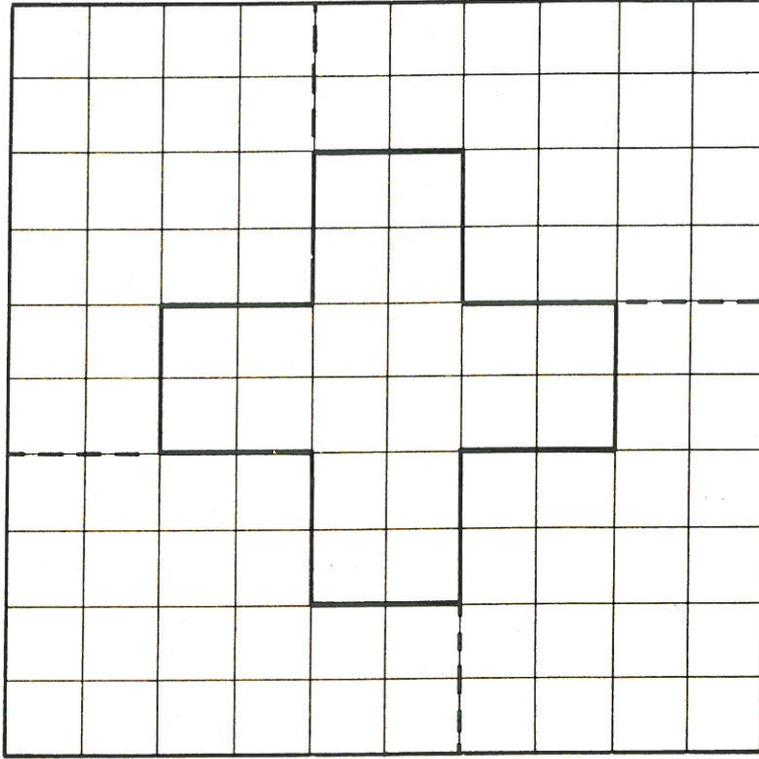
Dissection 4

- 1) Draw the rectangle. Cut along the dotted line.
Rearrange the pieces to make a square.
Stick the square in your book.



- 2) Draw some different rectangles.
Can you always make a square?

- 3) Draw this and cut it out. Look at the
centre piece. It is a cross. Use the four corner
pieces to make a larger cross.

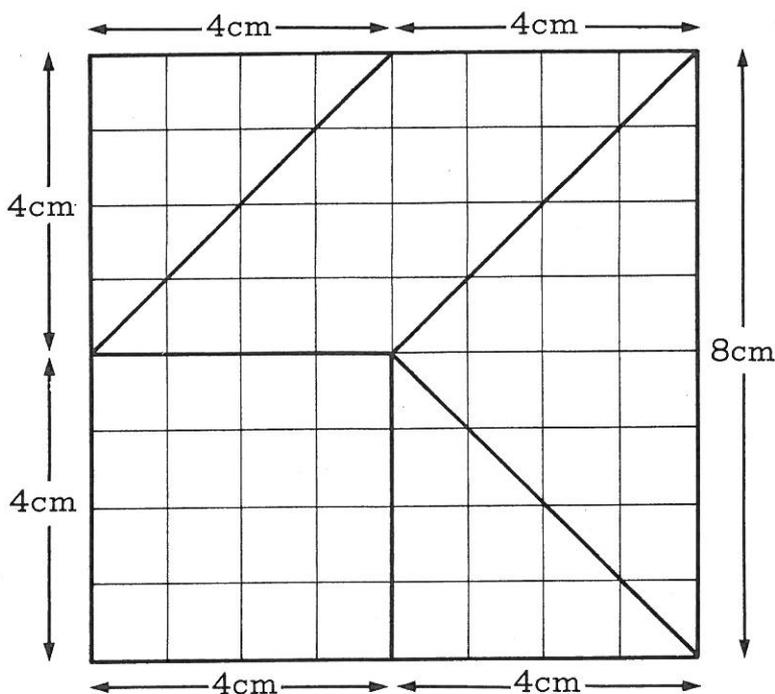


Turn over

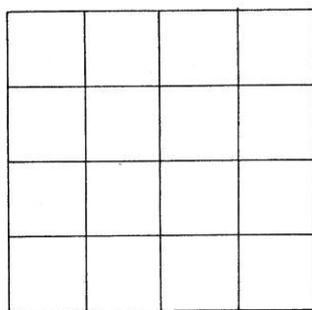
Tangram 1

Draw this on cm squared paper.

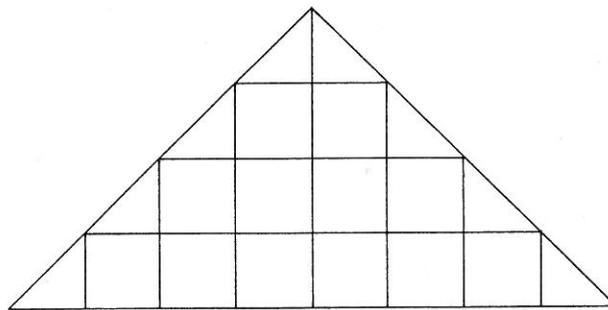
Cut out the pieces.



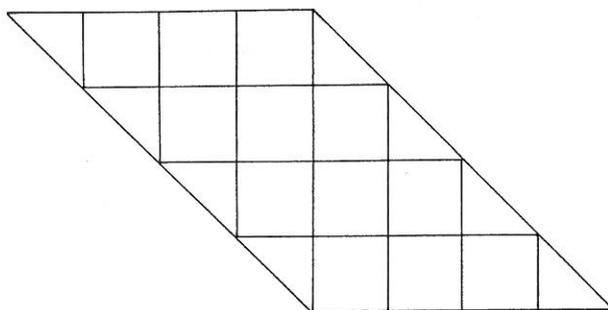
Here are the pieces you should have.



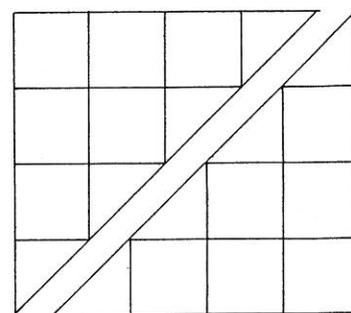
Square



Triangle



Parallelogram



2 small triangles

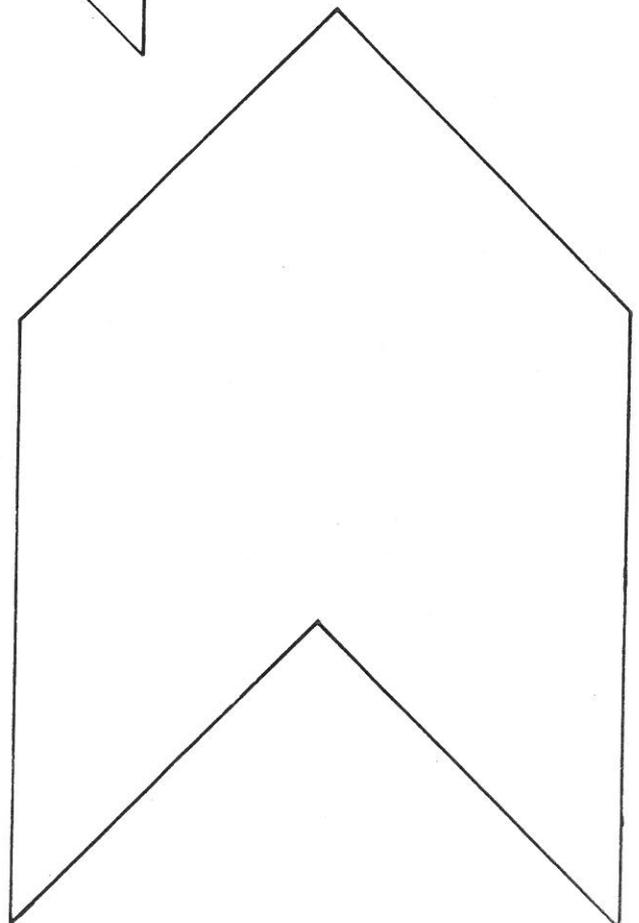
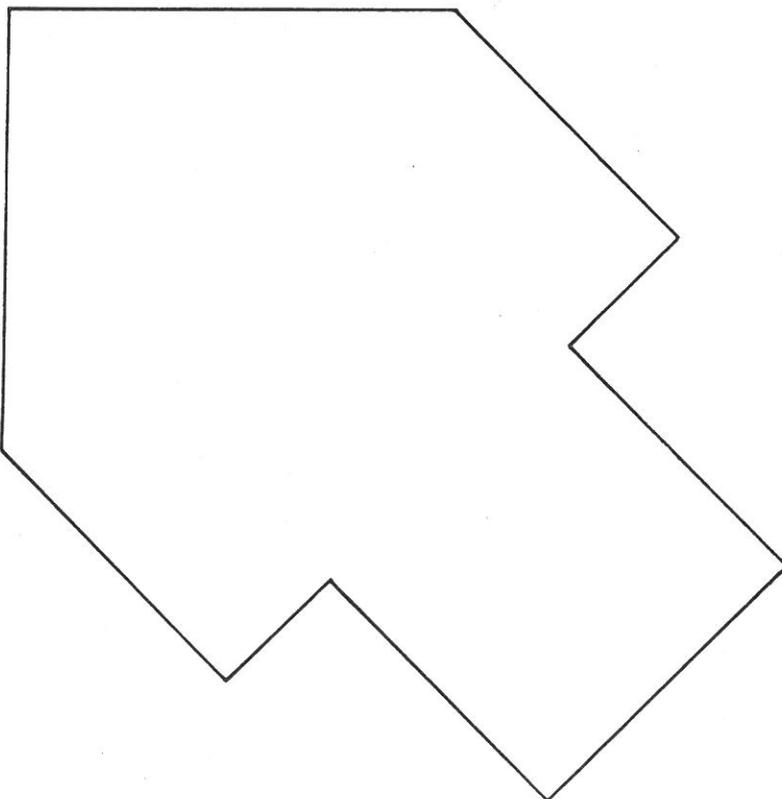
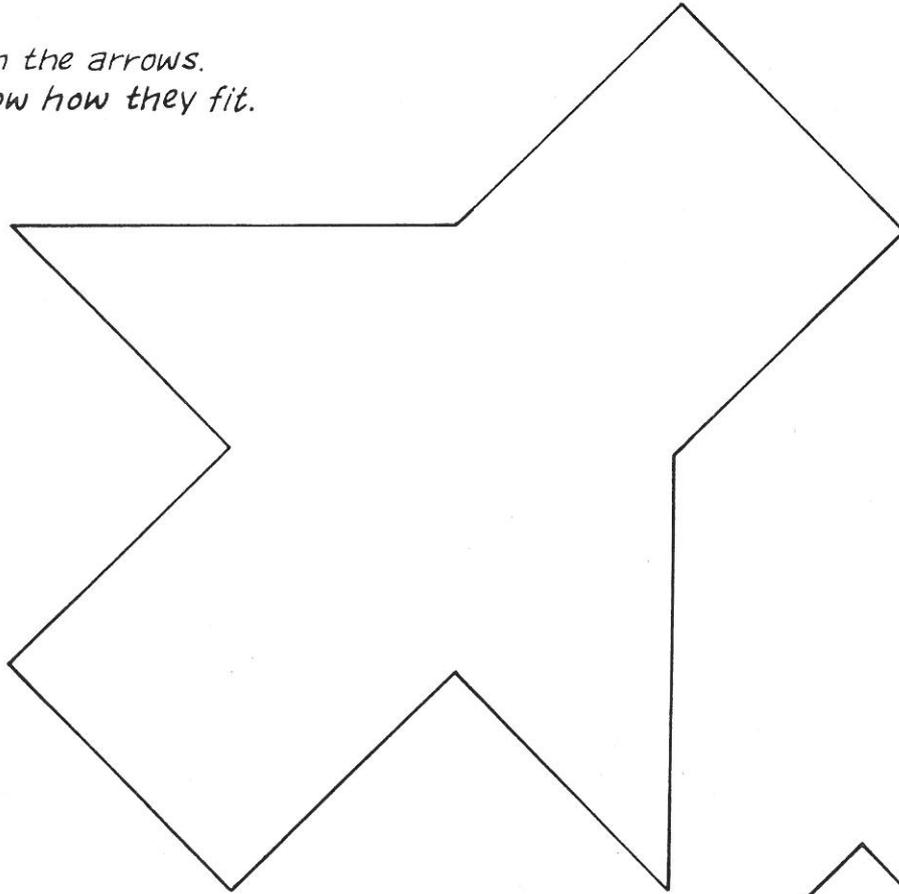
- 1) Make a square from some of the pieces. *There are two different answers.*
- 2) Make a rectangle from some or all of the pieces. *There are eight answers.* Can you find them all?
- 3) What do you notice about the square and the 2 small triangles?
 What do you notice about the large triangle and the 2 small triangles?
 What do you notice about the parallelogram and the 2 small triangles?
 What is the same about the square, large triangle and parallelogram?

KEEP YOUR PIECES! You will need them again.

TANGRAM ARROWS

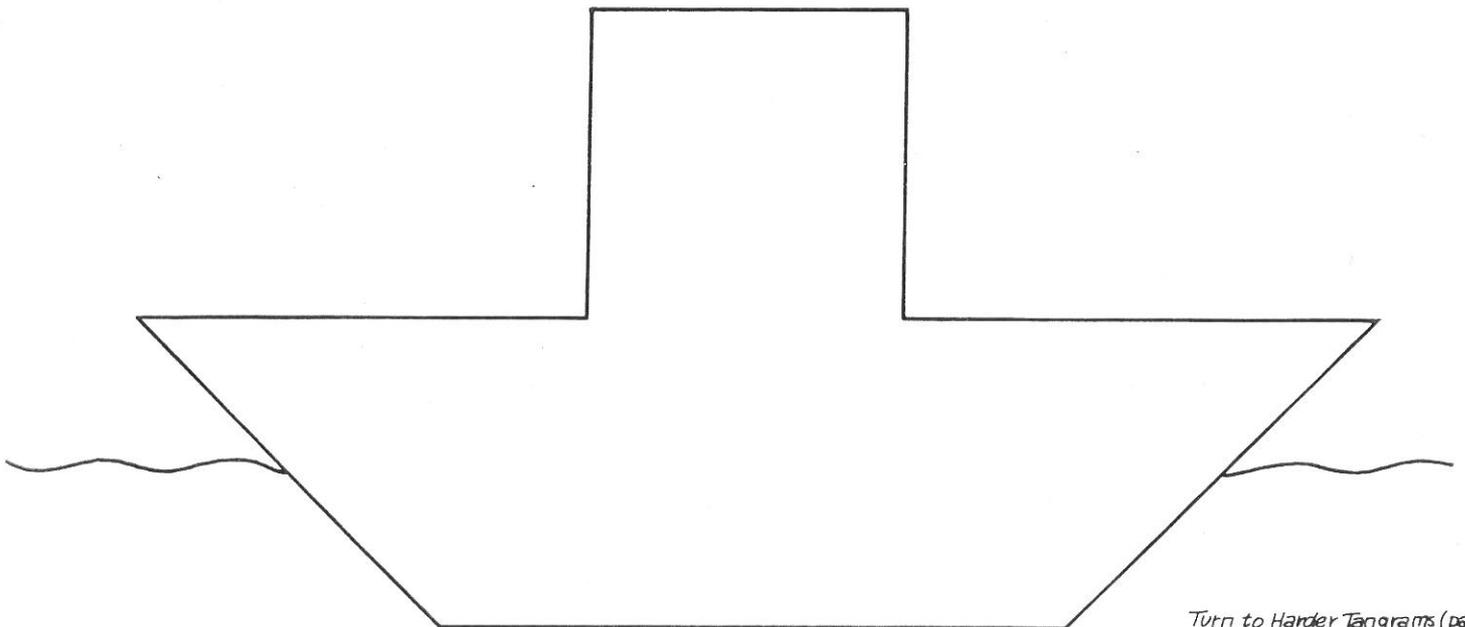
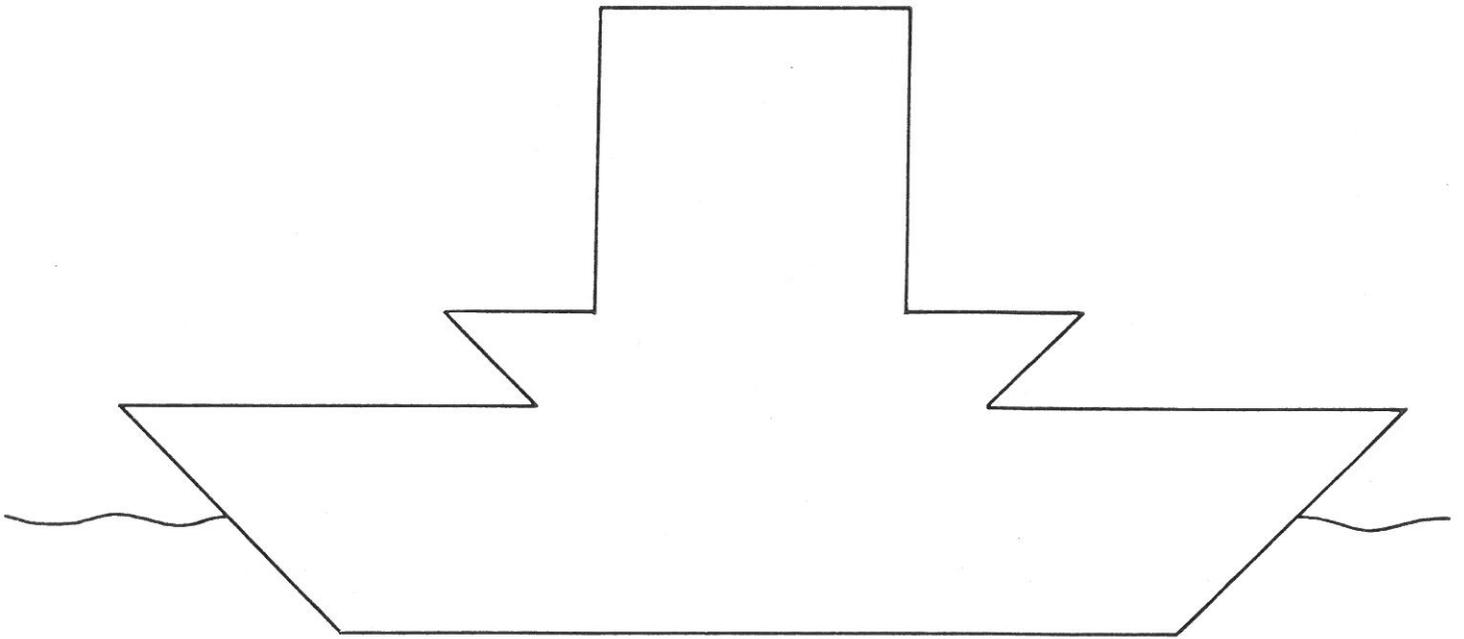
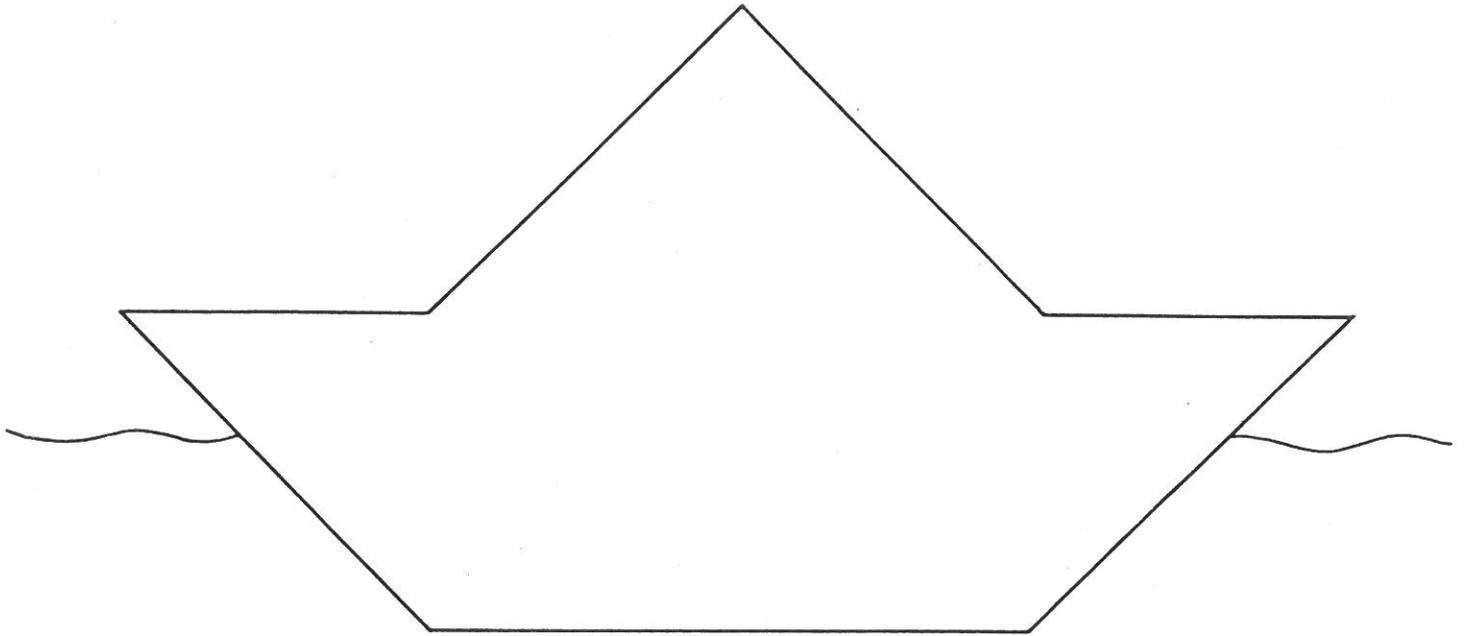
You will need the tangram pieces from card 0005

*Fit your pieces on the arrows.
Draw lines to show how they fit.*



TANGRAM SEA

Smile 1299 cont.



Turn to Harder Tangrams (page 3)

You will need gummed paper and scissors.

Smile 0040

Equilateral Triangle

Draw some **equilateral triangles** on gummed paper.

(Use the cut out to help you)

Cut out your **equilateral triangles**.

Use them to make these shapes.

Stick the shapes in your book.

