

Make geometry concepts take shape!

Puzzles teach students how to piece together geometric properties such as similarity, congruence, symmetry, and proportion. These brightly colored wooden puzzles build logical thinking, reasoning, and visual problem-solving skills.

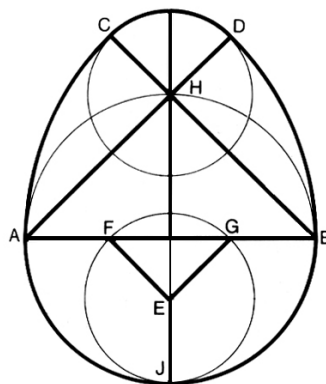
MathLove Puzzle : The Magic Egg

It is a well-known fact that birds come from eggs, and this puzzle proves it! Another variation of Tangram consists of 9 pieces cut from an egg-shape. You can make many kinds (species) of birds by assembling them. This egg puzzle is taken apart and reassembled.

It has the tendency to hatch one of the numerous varieties of birds.

■ How to make the Puzzle

- 1** Draw a circle with a 2" radius and mark diameters AB and HJ at right angles.
- 2** Draw the lines AH and BH and continue them about 2" .
- 3** Draw the arcs BD and AC (parts of circles centered on B and A) to meet these straight lines.
- 4** Draw a circle centered on H that touches, but does not intersect, the larger circles at C and D.
- 5** With the compasses at the same setting put the point on J and mark E : draw a circle centered on E.
- 6** Draw EF and EG. Cut out the pieces.



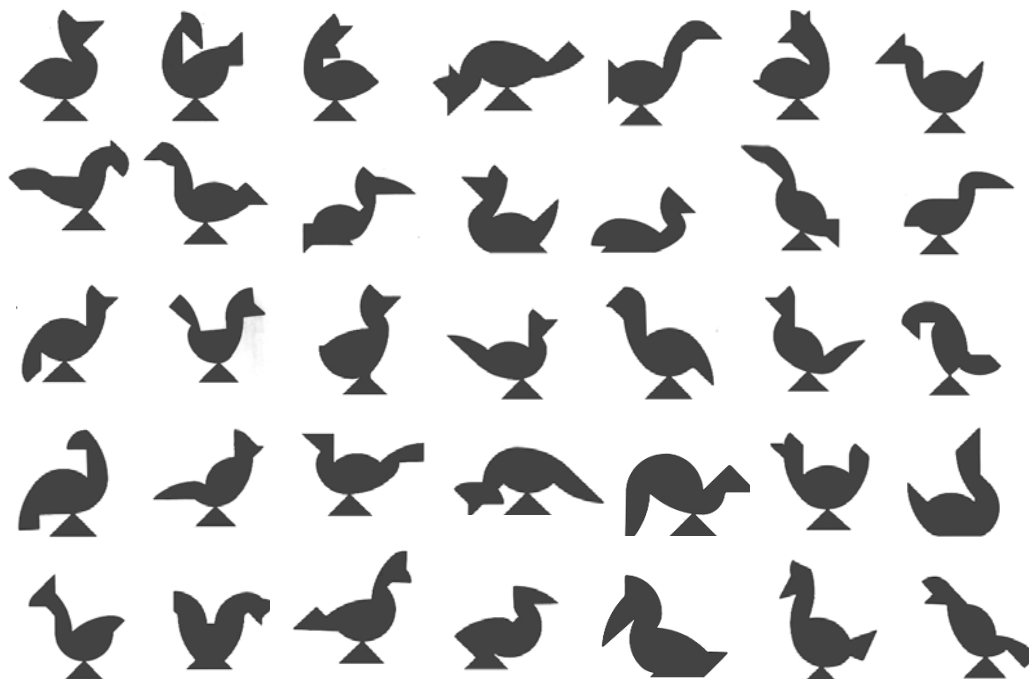
■ Materials

One square piece of plywood, cardboard, or acrylic, 3" x 3" . Varnish (or wood)

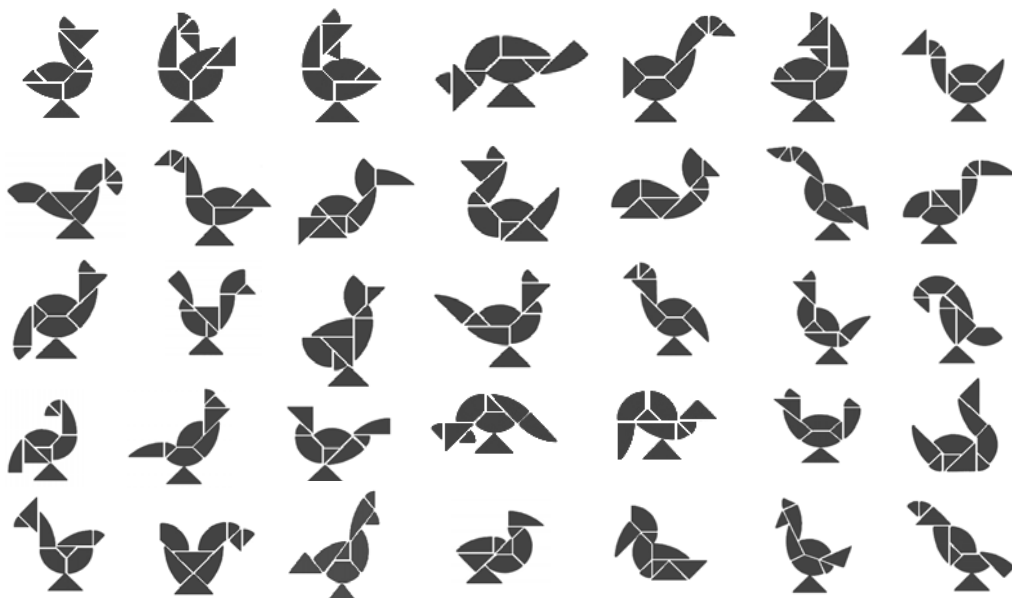
■ Tools

Ruler, pencil and compasses : fret saw and sandpaper (for wood or plastic) : knife and straightedge (for cardboard)

How many birds can you hatch from the Magic Egg?



Solution



• For more problems and solutions, go to www.mathlove.com