Symmetry: lines and rotational

MODULE 6 · 2D AND 3D SHAPE, ANGLES, SYMMETRY SHAPE & SPACE

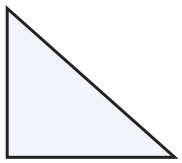
HOW TO ANSWER TODAY

- **Lines of symmetry.** A line of symmetry folds the shape so both halves match. Count every direction that works.

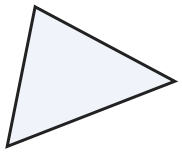
  Square → 4 lines (2 middles + 2 diagonals) Equilateral triangle → 3

STRETCH PROBLEMS

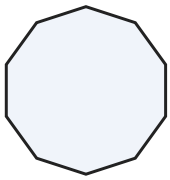
1. 5th class are painting a triangular banner for the GAA finals day. The banner is shaped like a right-angled scalene triangle, with three sides of different lengths. How many lines of symmetry does the banner have?



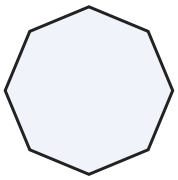
2. For STEM week, Cian's group is building a model bridge from card. One of the support pieces is cut in the shape of a scalene triangle. How many lines of symmetry does a scalene triangle have?



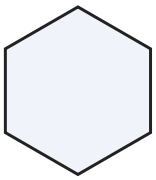
3. Mr Ó Briain's 5th class are painting a flower design on a new raised bed in the school garden. The flower's centre is a regular decagon. How many lines of symmetry does a regular decagon have?



4. Tadhg is painting a regular octagon shape onto a banner for the Cumann na mBunscol GAA finals day. He wants to fold the octagon along every line of symmetry to check his design is even. How many lines of symmetry does a regular octagon have?



5. The 5th class are designing a tile pattern for the floor of the new school polytunnel. Each tile is shaped like a regular hexagon. How many lines of symmetry does a regular hexagon have?



SHAPE & SPACE