# ☆ ☆ ANGLES IN POLYGONS AND REGULAR STARS ☆ ☆

1. What is the sum of all angles in a triangle?

2. What is the sum of all angles in a rectangle?

3. Draw a rectangle and use one line to split a rectangle into two triangles. Does it make sense that the sum of all angles in a rectangle is twice the sum of all angles in a triangle? Explain

4. Draw a pentagon. Use it to show that the sum of all angles in a pentagon is 540°.

5. What is the interior angle of a regular pentagon?

6. What is the sum of all angles in a hexagon?

7. What is the interior angle of a regular hexagon?

8. What is the sum of all interior angles in a a polygon with n vertices?

9. This regular five-point star is such that by extending the sides you can inscribe a regular pentagon in it.

Find the acute angle in the five-point star.
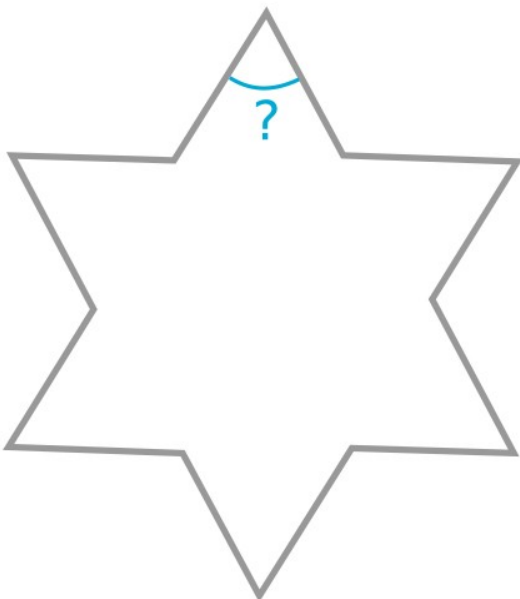
10. This regular six-point star is such that by extending the sides you can inscribe a regular hexagon in it.

Find the acute angle in the six-point star.