Exterior Angles of Regular Polygons

3 Equilateral Triangle — 120°, 120°, 120°

4 Square — 90°, 90°, 90°, 90°

5 Pentagon — 72°, 72°, 72°, 72°, 72°

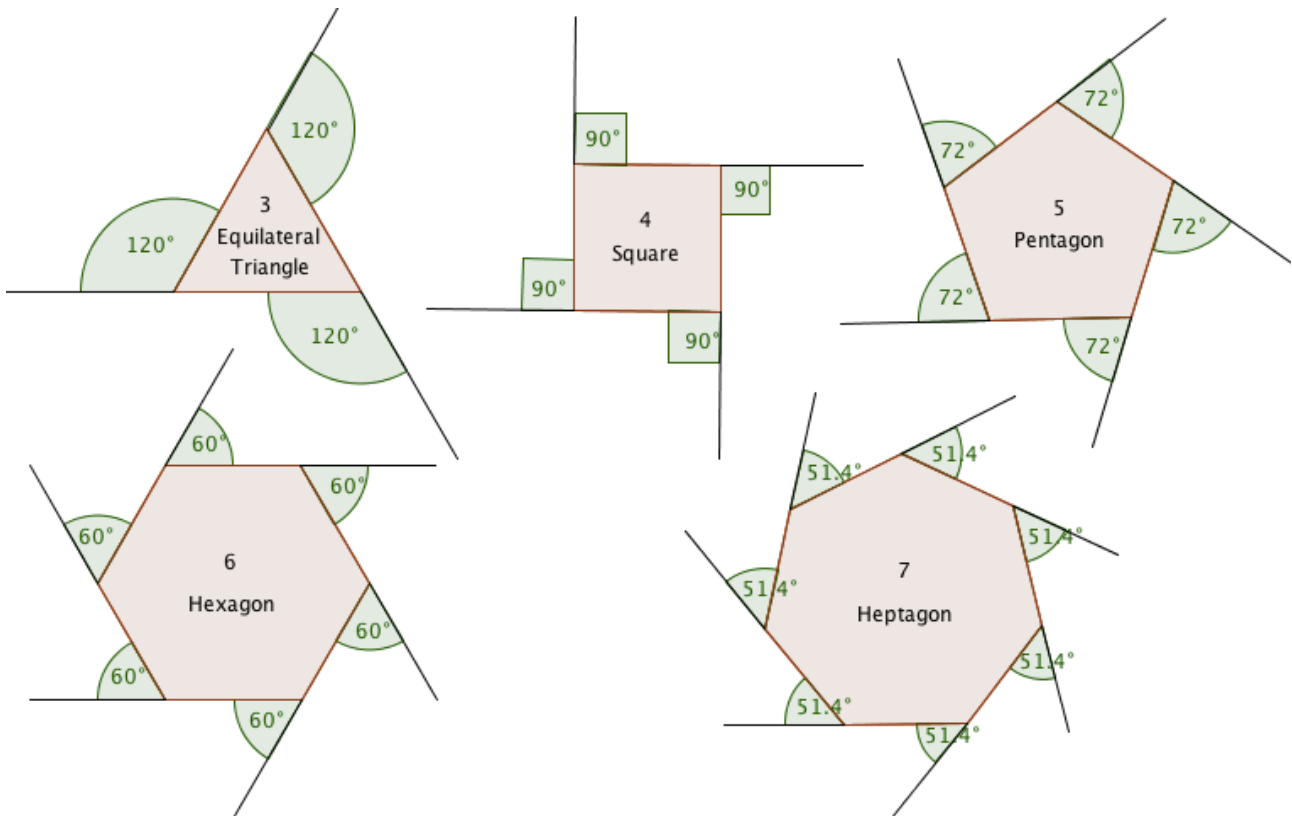**6** Hexagon — 60°, 60°, 60°, 60°, 60°, 60°

7 Heptagon — 51.4°, 51.4°, 51.4°, 51.4°, 51.4°, 51.4°, 51.4°

Imagine starting in the middle of a side of a regular polygon and walking clockwise around it. At every corner you turn clockwise, and by the time you get back where you started you have turned through a full circle of 360º.

So the exterior angles you have turned through must add up to 360º. Since they are all equal for a regular polygon, their size is 360º ÷ n, where n is the number of sides.

8 Octagon — 45°, 45°, 45°, 45°, 45°, 45°, 45°, 45°

9 Nonagon — 40°, 40°, 40°, 40°, 40°, 40°, 40°, 40°, 40°

10 Decagon — 36°, 36°, 36°, 36°, 36°, 36°, 36°, 36°, 36°, 36°