

1. Draw a polygon with a reëntrant angle; with two reëntrant angles.
2. Draw a polygon having equal sides and equal angles. Such a polygon is a regular polygon. Define *regular polygon*.
3. Into how many triangles may a polygon be divided. Make a general statement.
4. Find the sum of the interior angles of a pentagon; of an octagon; of any polygon. Make a general statement.
5. Bisect the angles of a regular polygon. What do you find in regard to the bisecting lines? Can you prove that this point is equally distant from all the corners and from all the sides?
6. Bisect the angles of an equilateral triangle; of a square; of a regular pentagon; of a regular hexagon. Find the angle at the centre in each case.
7. Can you construct, with the aid of a protractor, an equilateral triangle? a square? a regular pentagon? a regular hexagon? a regular octagon?
8. Can you make a hexagon having five right angles? having four right angles?
9. Can you divide a hexagon into three rectangles and four right-angled triangles? into a square and four isosceles triangles?
10. Draw an equilateral triangle. Can you construct another equal to it?
11. Draw a heptagon. Can you construct another equal to it?
12. Name several units of area. Define a unit of area.
13. Show by diagram what is meant by 4 square feet; 8 square rods; 6^{ac}.
14. Repeat all the tables of square measure.
15. From what you have learned, give the formula for finding the area of a parallelogram, letting S = area or surface, a = base, h = altitude.
16. Give the formula for finding the base of a parallelogram when the area and altitude are given; for finding the altitude when the area and base are given. Give the formula for finding one side of a square when the area is given.