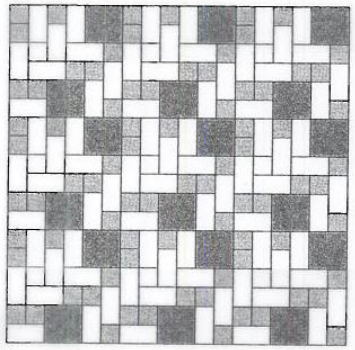
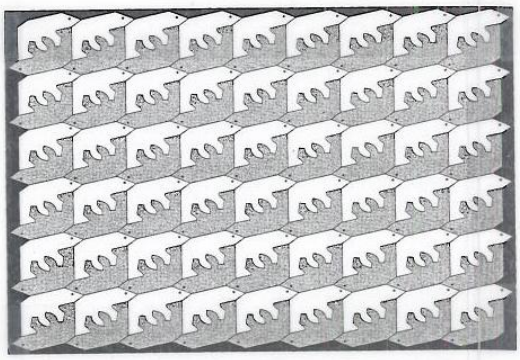
Tessellations (Section 13.4)

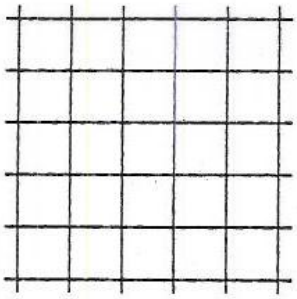
Tessellation:

Examples:

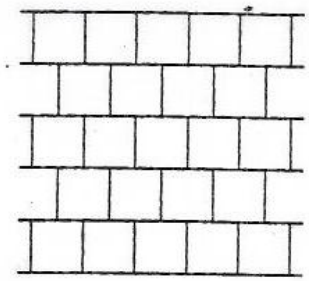




The simplest tessellation of a plane can be achieved with squares. Here are 2 possibilities:



(a)



(b)

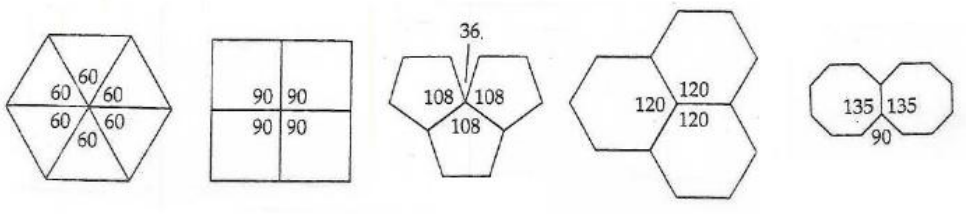
Regular Tessellation:

Which regular polygons will tessellate (using only copies of that polygon)?

Regular Polygon	**Interior Angle Measure**	**#of Angles at Each Vertex**	**Sum**	**Tessellate?**
Triangle				
Square				
Pentagon				
Hexagon				
Heptagon				
Octagon				

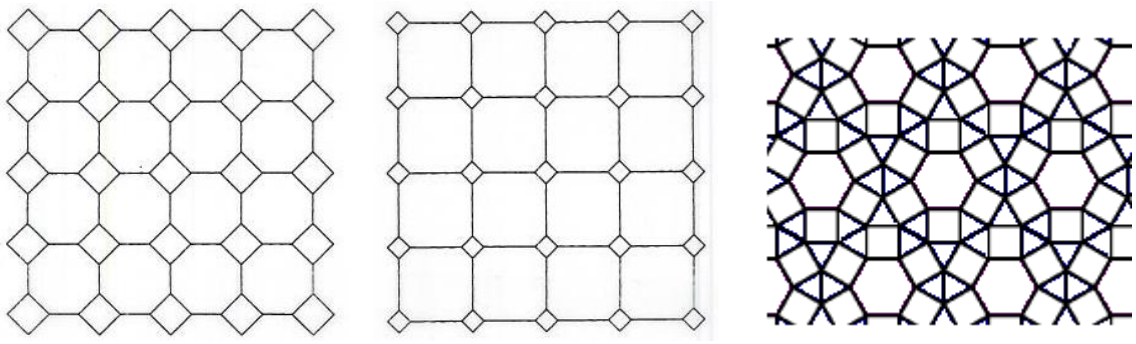
What must be true about the measure of the interior angles for the polygon to tessellate?

Examples:



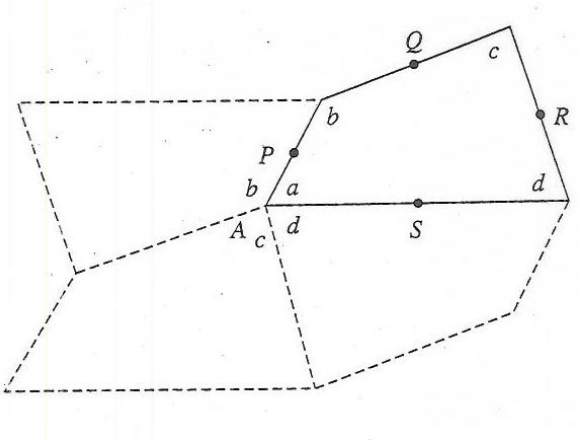
Semi-Regular Tessellation

Examples: Decide whether each of the following is a semi-regular tessellation. If it is not, explain why.



Tessellations using Convex Quadrilaterals:

Example:



*Using this method, any quadrilateral (convex or concave) will tessellate the plane.

Example: Using the method above, tessellate a portion of the page below using a convex quadrilateral with no parallel sides.

Homework: Page 817: 2, 3, 9