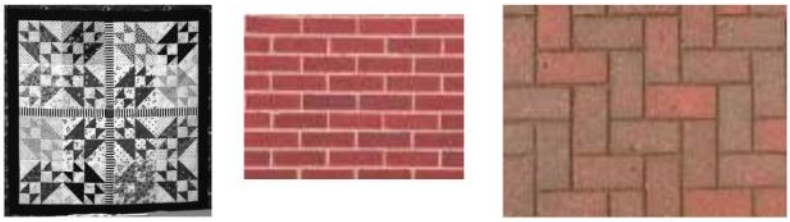
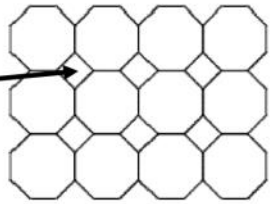
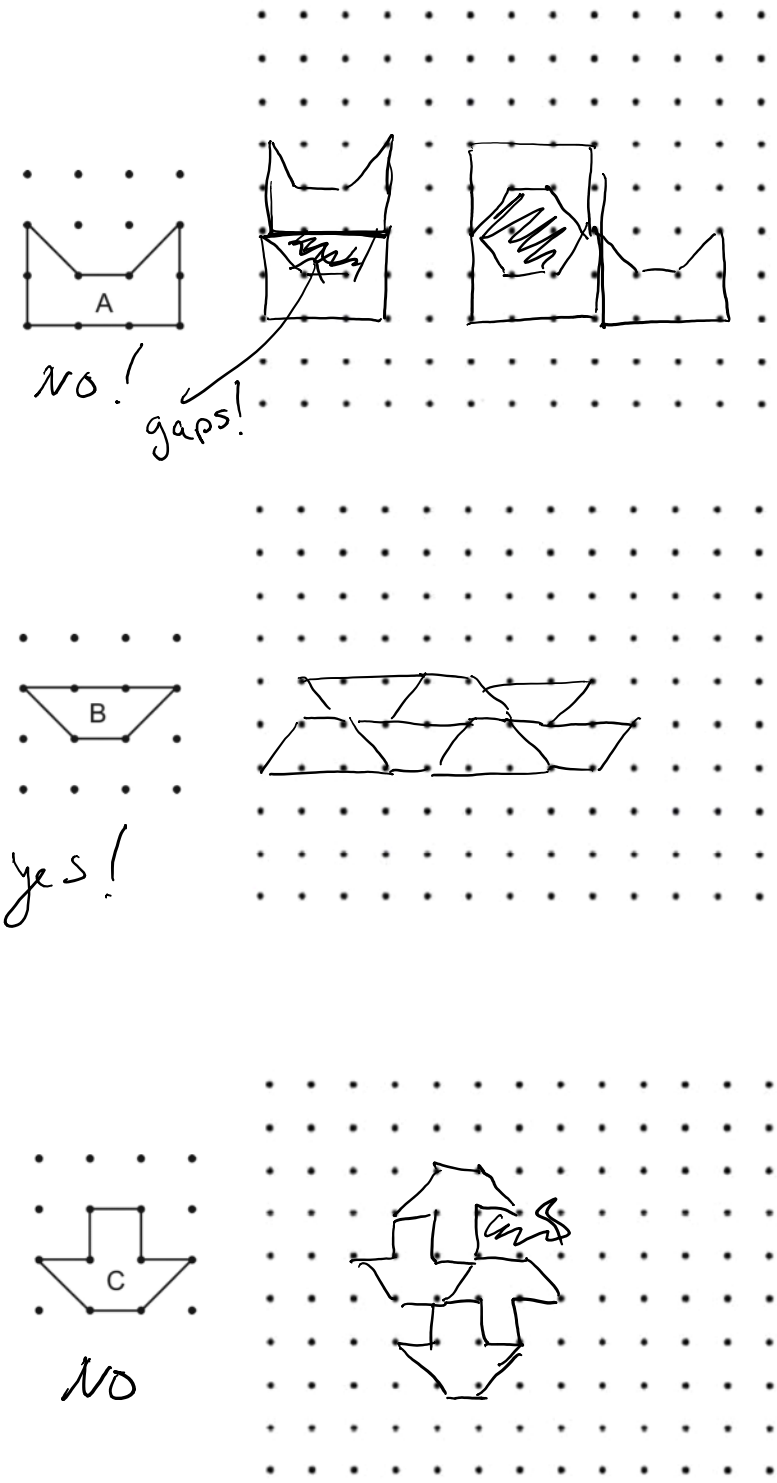
8.5 Constructing Tesselations

Wednesday, May 18, 2016 8:31 AM

Microsoft Word - 8.5 Constructing Tessellations

Topic: 8.5 Constructing Tessellations	Name: _____ Class: Math 8 Date: _____
Questions/Main Ideas:	Notes:
Learning Intention:	Construct and analyse tessellations
Quick Review:	When congruent (identical) copies of a shape cover an area with no overlaps or gaps, we say the shape is a *tessellation.* The pattern is repeated by reflection, rotation, translation or some combination of these. Here are some tessellations that we see every day.  Cool Website for Ceramic Tiles Where else might you see tessellations in nature: • • • • •
Check out this Video: Nature by Numbers.	
	Some polygons will tessellate and others do not. For copies of a polygon to tessellate, the SUM of the angles at any point where vertices meet must be 360^0. + corners points *In this way the polygon surrounds the point.* Gaps  Therefore these octagons DO NOT tessellate.

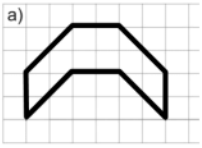
Something challenging	Do these shapes tessellate?
Remember to try all the transformations: • Rotation • Reflection • Translation	

Hmm...

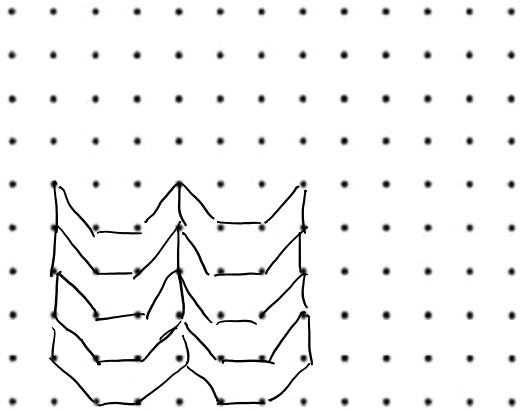
Is there a pattern to find out if a polygon will tessellate rather than having to draw it?

- shapes are parallel to eachother
- all the vertices at a point add to 360°

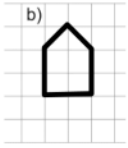
a)



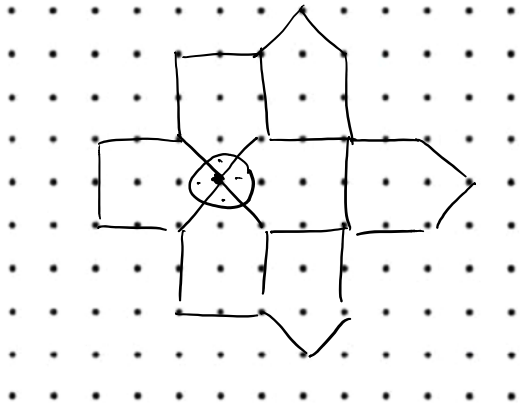
yes



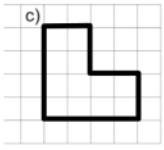
b)



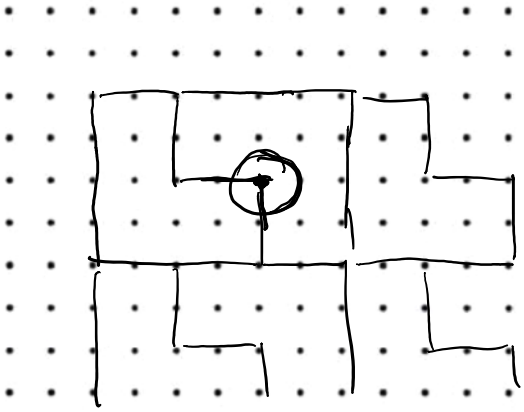
yes



c)



yes



Next Step:	p 467 # 6 ab, 7 a b c e, 11 a b d e, 14 → Due at the end of class.

Ch. 8 openbook test Tuesday.