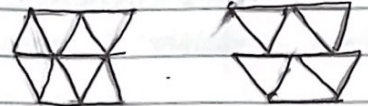
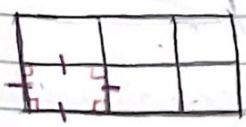
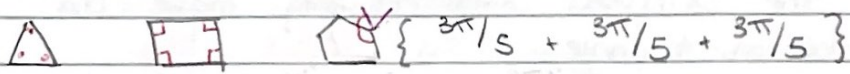


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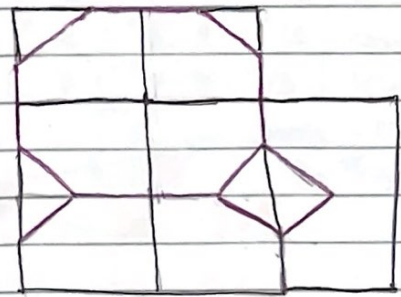
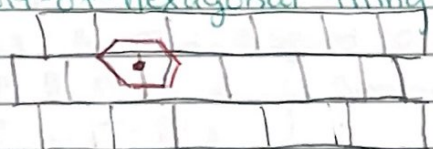
Tiling Given some shapes, try to cover the plane with them so that
 ① no part of the plane is uncovered,
 & ② no overlaps, except for the borders



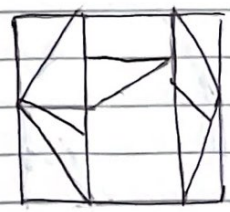
Only **three** tilings of the plane by **two** regular polygons such that each vertex is like every other.



Sort-of-hexagonal tiling with squares



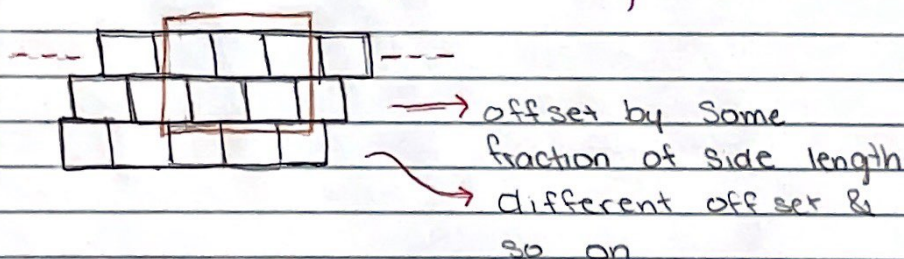
octagons
&
squares



Definition: A tiling is **periodic** if you can tile the plane by taking the part in some parallelogram & translating it (edge to edge) to cover the plane



Non-periodic or aperiodic tilings



What other ways are there to create non-periodic tilings?

Can it be done with tilings that are edge to edge (& vertex to vertex) for all the tiles?

Penrose Tiles 

Allow one to tile the plane, but only non-periodically.

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