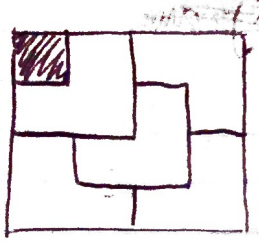
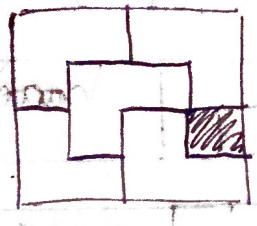
COMP361 Assignment 1 : David Burrell : 3000209541

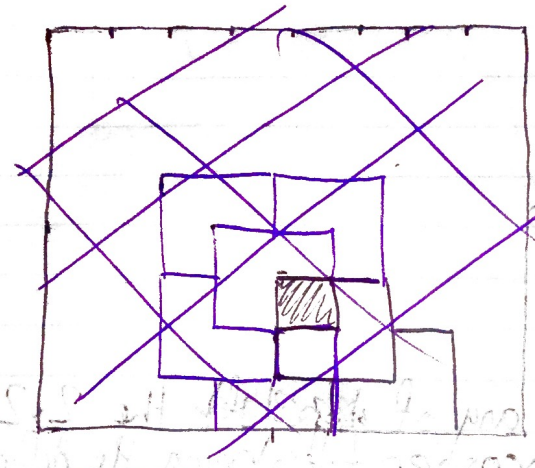
1S.

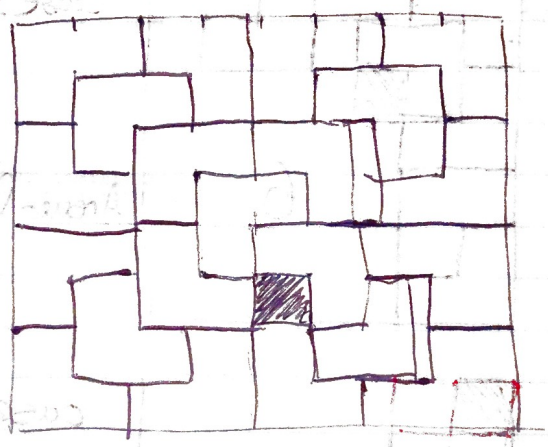


2.

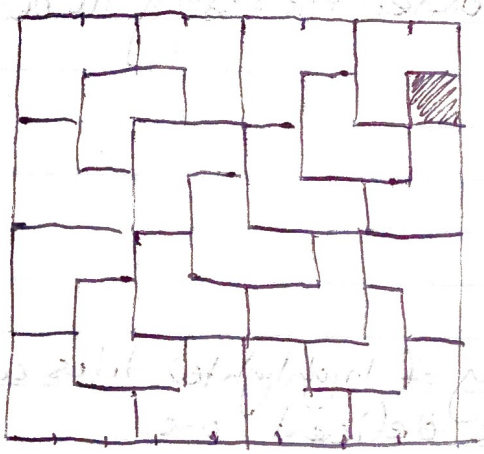


3.





4S.



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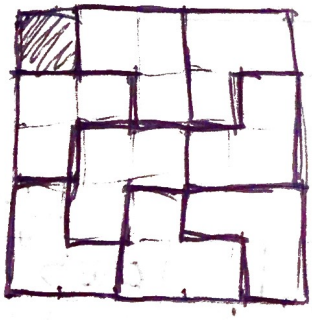
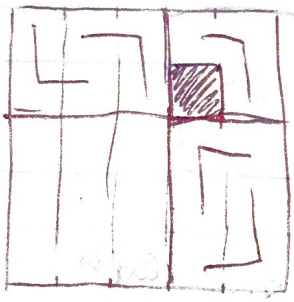


7.



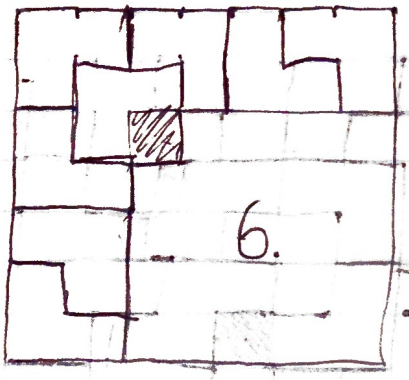
Any 2×2 :

Any 2×3

this board can't be divided into sections in which all spaces are filled with trominoes. as a 3×3 is not tileable.

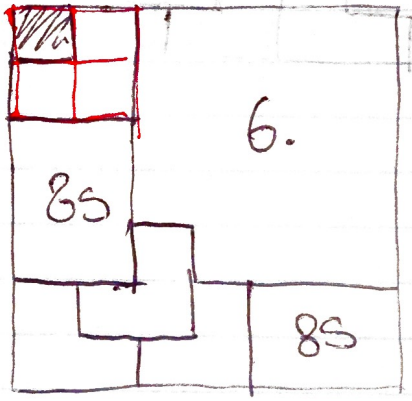
8. Any $2i \times 3j$ board can be tiled with $i \times j$ times  boards.

9.

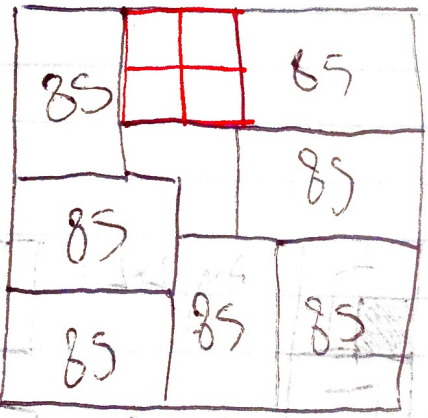


case 1.

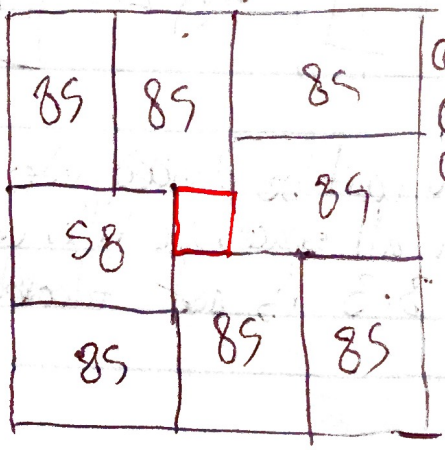
Answer for 6



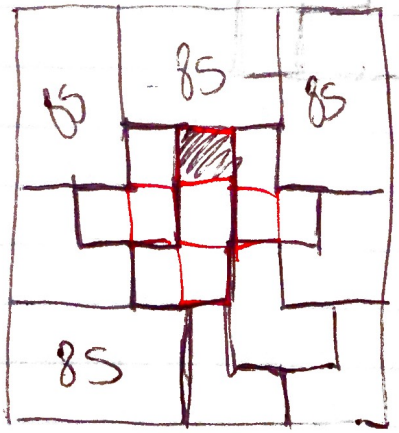
case 2: any of ~~the~~ the 2×2 (any) corner tiles being the deficient one



case 3: Any of highlighted tiles can be the deficient one.

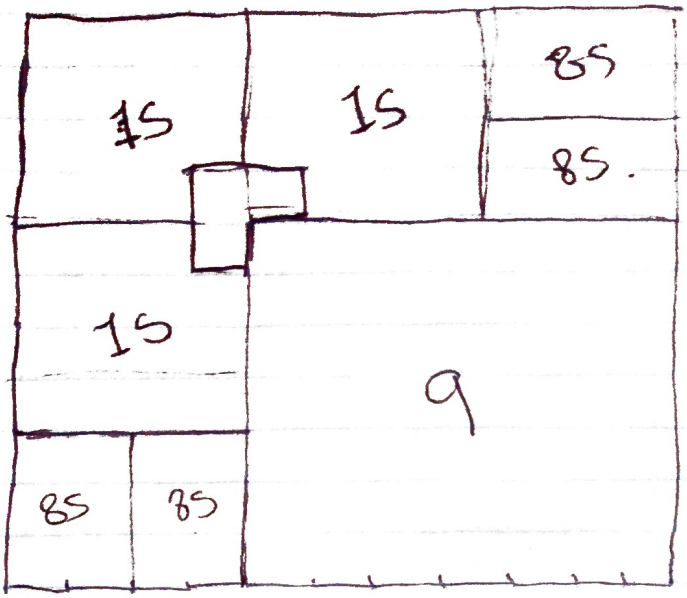


case 4 (center deficient):



works for case 5 ∨ any of the highlighted tiles.

10.



The Deficiency will occur within a ~~7x~~ 7 square, the remaining area can be divided up like so.