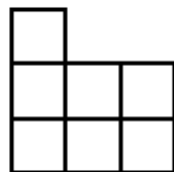15. The figure shown alongside is made from seven small squares. Some of these squares are to be shaded so that:

    (i)   at least two squares are shaded;

    (ii) two squares meeting along an edge or at a corner are not both shaded.

How many ways are there to do this?
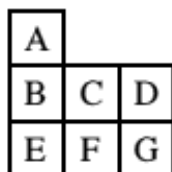
A 4   B 8   C 10   D 14   E 18

15. C   Label the squares as shown. Possible pairs to be shaded which include A are AD, AE, AF and AG. Pairs excluding A are BD, BG, DE, EG. Triples must include A and there are two possibilities, ADE and AEG. This gives 10 ways of shading the grid,