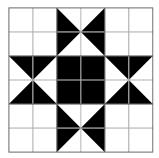


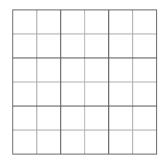
Problem of the Week Problem B

Quilt Designs for Barns

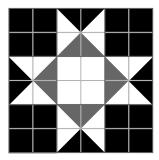
Sometimes people decorate their barns with quilts. These barn quilts are often designed in a square grid with a variety of colours and patterns, and they usually have symmetry in such a way that if they're rotated they will look the same. In the 6 by 6 grids below, you are going to explore and create some barn quilt designs. In each part, you can add straight lines as needed.

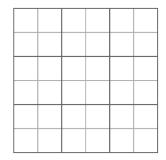
(a) What fraction of the barn quilt design below is black, and what fraction is white? In the blank grid, design another barn quilt using two colours and the same fractions.



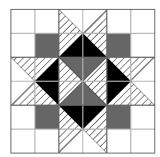


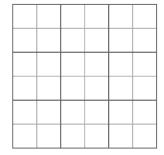
(b) What fraction of the barn quilt design below is black? Grey? White? In the blank grid, design another barn quilt using three colours and the same fractions.





(c) What fraction of the following barn quilt design below is black? Grey? Striped? White? In the blank grid, design another barn quilt using four colours and the same fractions.





GEOMETRY & MEASUREMENT, NUMBER SENSE THEMES: