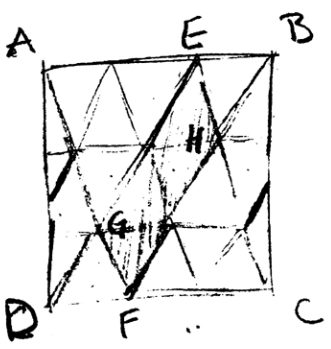


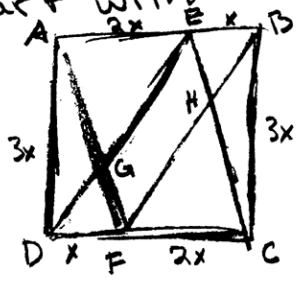
Work:



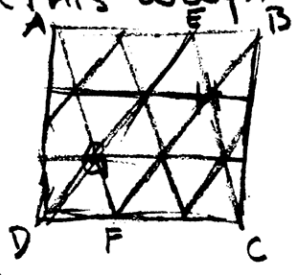
#2

Answer: $\frac{2}{9}$

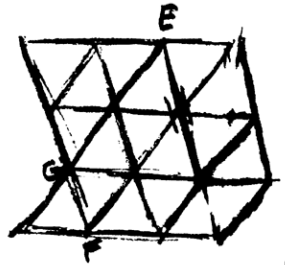
Why: You start with a square, ABCD. You know the ratio of the sides.



\overline{ED} and \overline{BF} must have a slope of $\frac{3}{2}$, while \overline{AF} and \overline{EC} have a slope of -3 . Draw equal spaced lines across the square in this way. Also draw horizontal lines through the intersections.



Take $\triangle AGD$ and attach it to the other side.



There are 18 triangles, four of which are in the quadrilateral EG FH, so the ratio of EG FH to ABCD is $\frac{4}{18}$, or $\frac{2}{9}$.