Pattern Block Grid Paper

Reference | Pattern-block shape library and worked hexagon | LETTER

One grid step = s = 12 mm at 100%; the trapezoid long base spans 2s.



Triangle

unit sides s



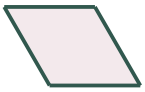
Square

unit sides s



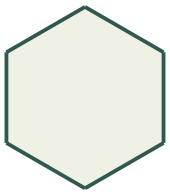
Trapezoid

short s | long 2s



Rhombus

unit sides s

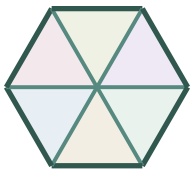


Regular hexagon: six sides s

Worked example: six triangles in one hexagon

Original prompt

Fill one hexagon outline with six triangle outlines, each sharing one edge with the hexagon and meeting at the center.



Each wedge shares two radius edges; the six outer edges form the hexagon boundary.

Answer

Six equilateral triangles fill the regular hexagon as six wedges around its center. Each triangle's outer side is one hexagon edge, and its two radial sides meet neighboring triangles; all six meet at the center.

Reasoning

For a regular hexagon of side s, the center-to-vertex radius is also s. Therefore each of the six sectors is an equilateral triangle of side s; six such sectors cover the hexagon exactly.

Check

Count six triangular wedges, check one outer edge per wedge on the hexagon, and trace the six radii to confirm neighboring seams meet at the center without a gap or overlap.