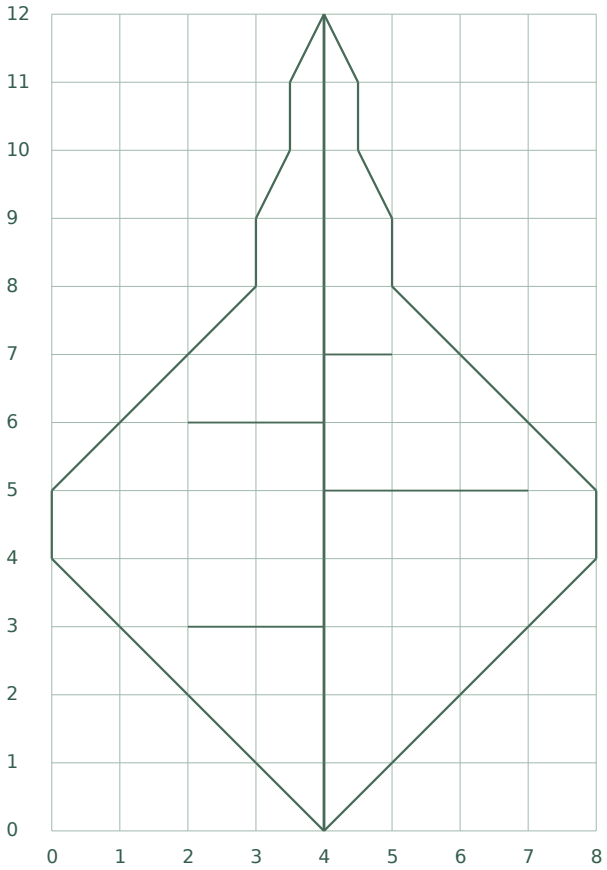
8 by 12 cells / 9 mm printed practice cells



Widths refer to intervals above the base, not an extra base row. Both outlines start at the common base; the final zero gives one common tip.

Your width/vein record: _____

Grid Leaf Drawing: Outline and Vein Construction

Original worked example / unchanged complete key

Prompt: On an 8 by 12 cell frame with a vertical midrib, plot a simple leaf outline using these hypothetical half-widths in cells from base to tip: 1, 2, 3, 4, 4, 3, 2, 1, 1, 0.5, 0.5, 0. Then place side veins at rows 3, 5, 6, and 7, alternating left and right; each must end exactly one cell short of the outline. Describe the grid steps and vein cell counts.

Answer: Mark the frame corners and vertical midrib from the bottom-center intersection to the top-center intersection. Treat the frame as 8 cells wide and 12 cell intervals tall, giving 13 horizontal grid lines. Starting at the base line, plot left and right outline points at each interval using the 12 half-widths: interval 1 at 1 cell each side, interval 2 at 2, interval 3 at 3, intervals 4 and 5 at 4, interval 6 at 3, interval 7 at 2, intervals 8 and 9 at 1, intervals 10 and 11 at 0.5 (cell centers), and interval 12 at 0 (the tip on the top frame line). Join points with short straight segments. For veins, interval 3 has half-width 3, so a left vein ends 2 cells out; interval 5 has half-width 4, so a right vein ends 3 cells out; interval 6 has half-width 3, so a left vein ends 2 cells out; interval 7 has half-width 2, so a right vein ends 1 cell out. Each endpoint is exactly one cell short. Confirm every point lies on an intersection or cell center.