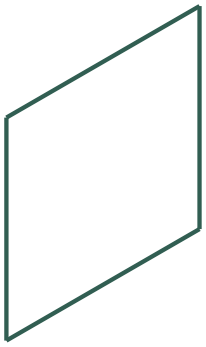
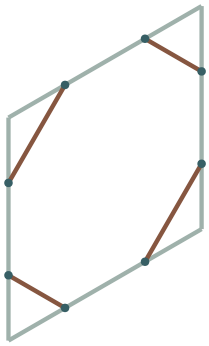
Draw Isometric Octagon

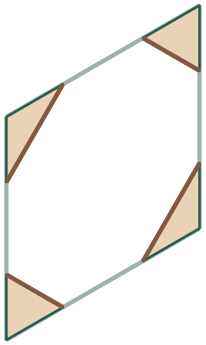
Reference | Construction reference | LETTER



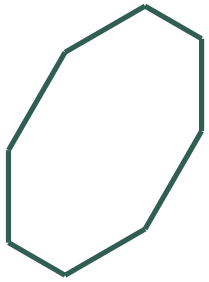
Square frame



Join equal trims



Shade outside triangles



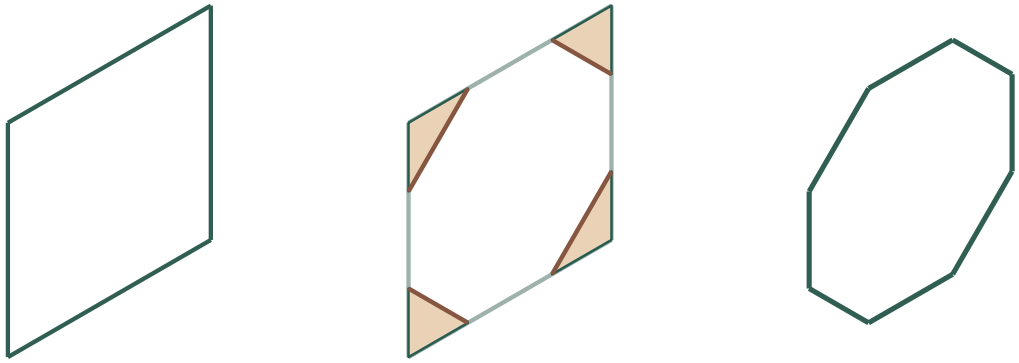
Keep eight sides

Draw Isometric Octagon

Reference I Worked example I LETTER

Original prompt

Construct an isometric octagon from an isometric square frame, showing the corner cuts and the final eight-sided outline.



Projected square | Equal corner cuts | Eight sides

Answer

Show the projected square frame, the four same-size corner cuts marked by their endpoints, and the final eight-sided outline. Opposite diagonal cuts are parallel; adjacent cuts point along different directions.

Reasoning

If the square side is S and the trim is t, each kept side has true length S minus 2t and each cut has true length t times the square root of 2. Choosing t = S divided by (2 plus the square root of 2) makes those true lengths equal before projection.

Check

Count eight connected sides. Check opposite pairs are parallel and every diagonal joins the marked trim points. Equal true lengths may project to different page lengths.