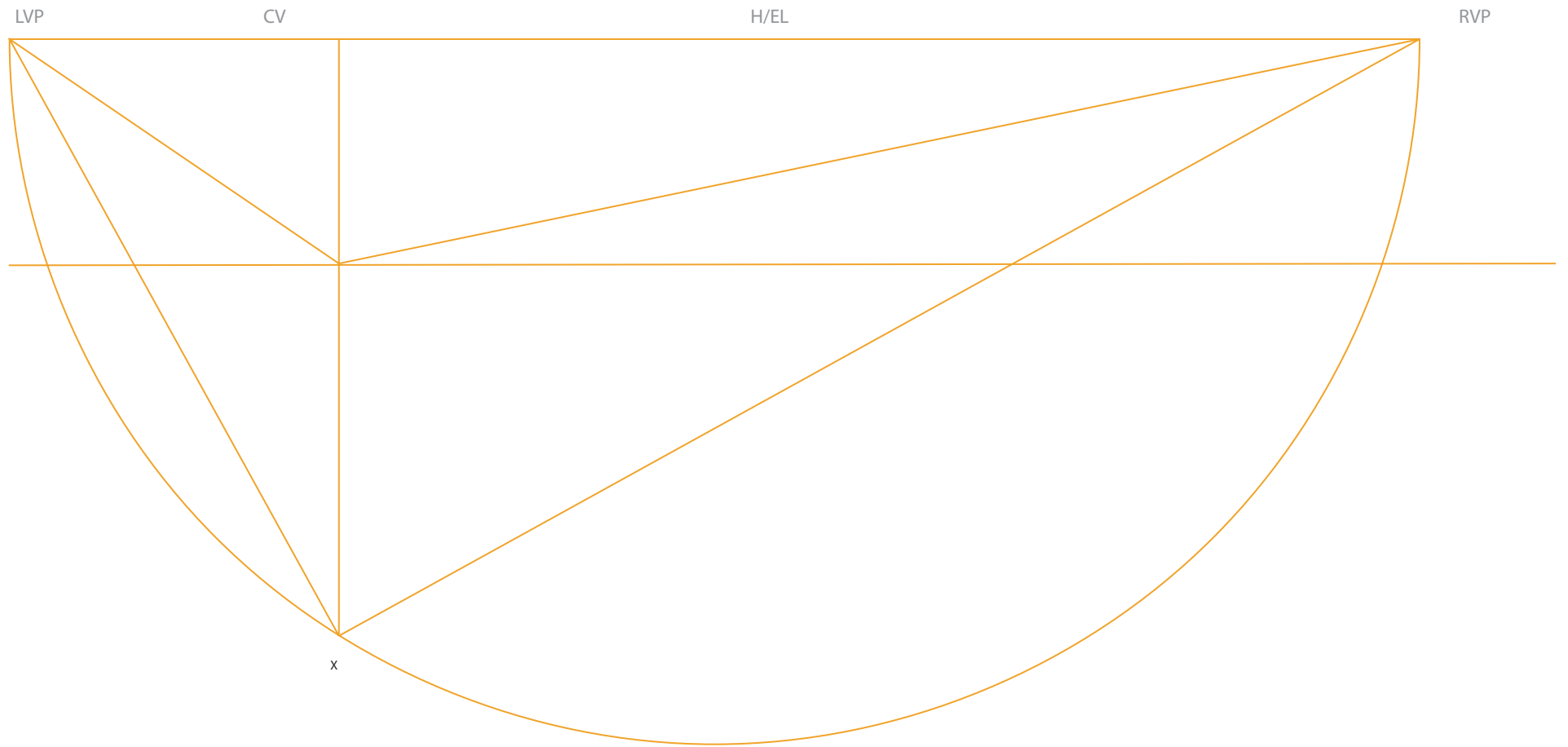


HOW TO DRAFT THE DOME

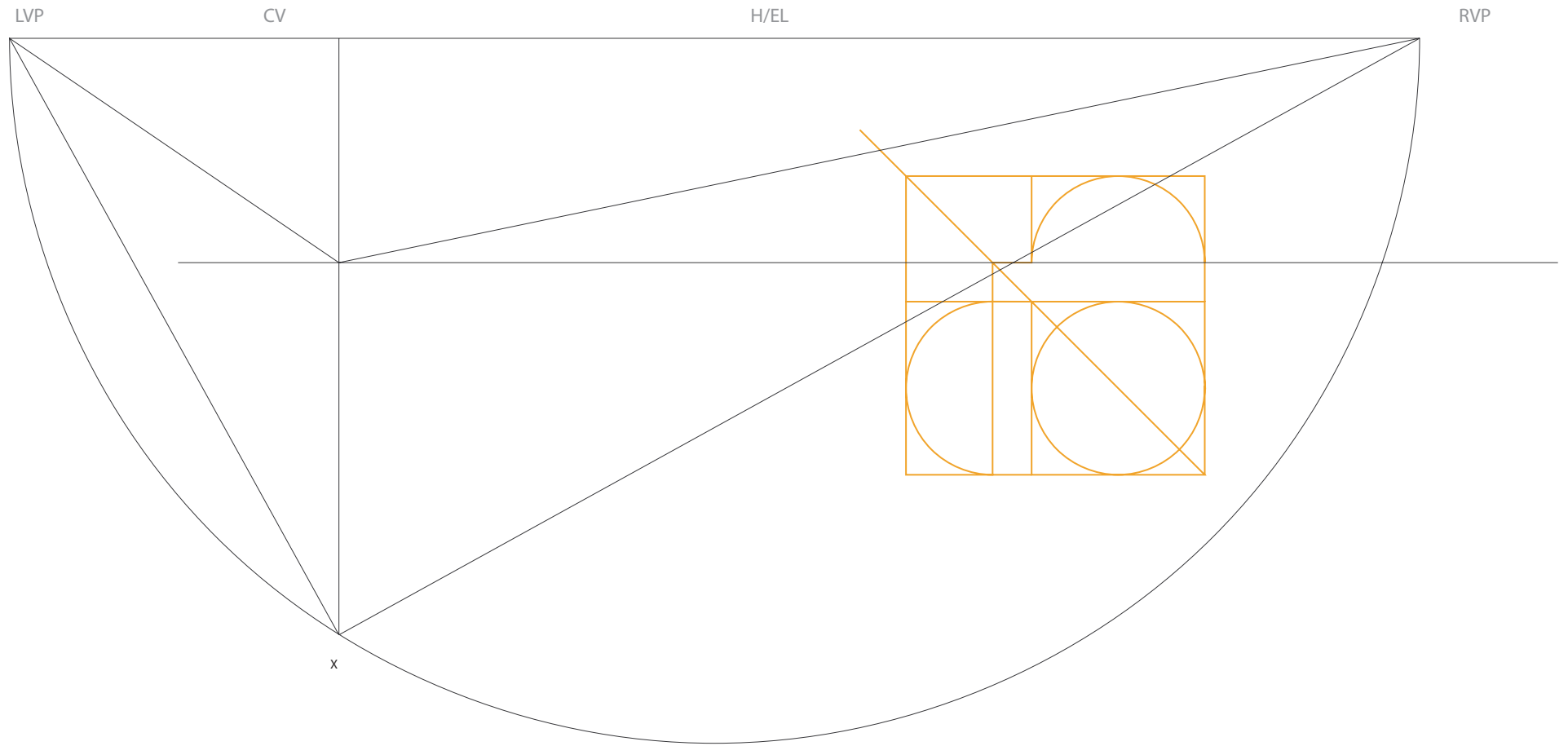
Rebecca B. Bennett



step 1
Set up the formula.

HOW TO DRAFT THE DOME

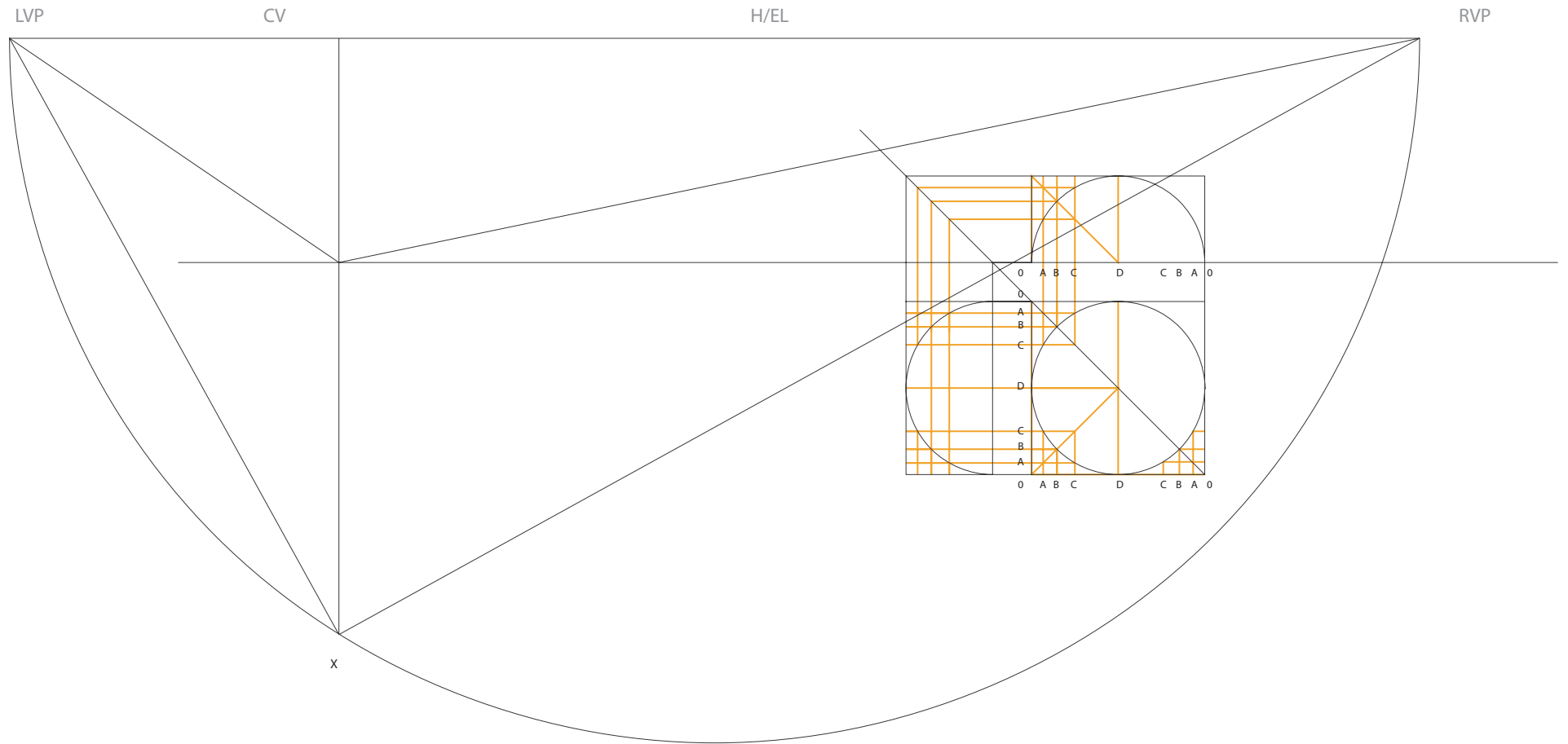
Rebecca B. Bennett



step 2
Draft the orthographic views.

HOW TO DRAFT THE DOME

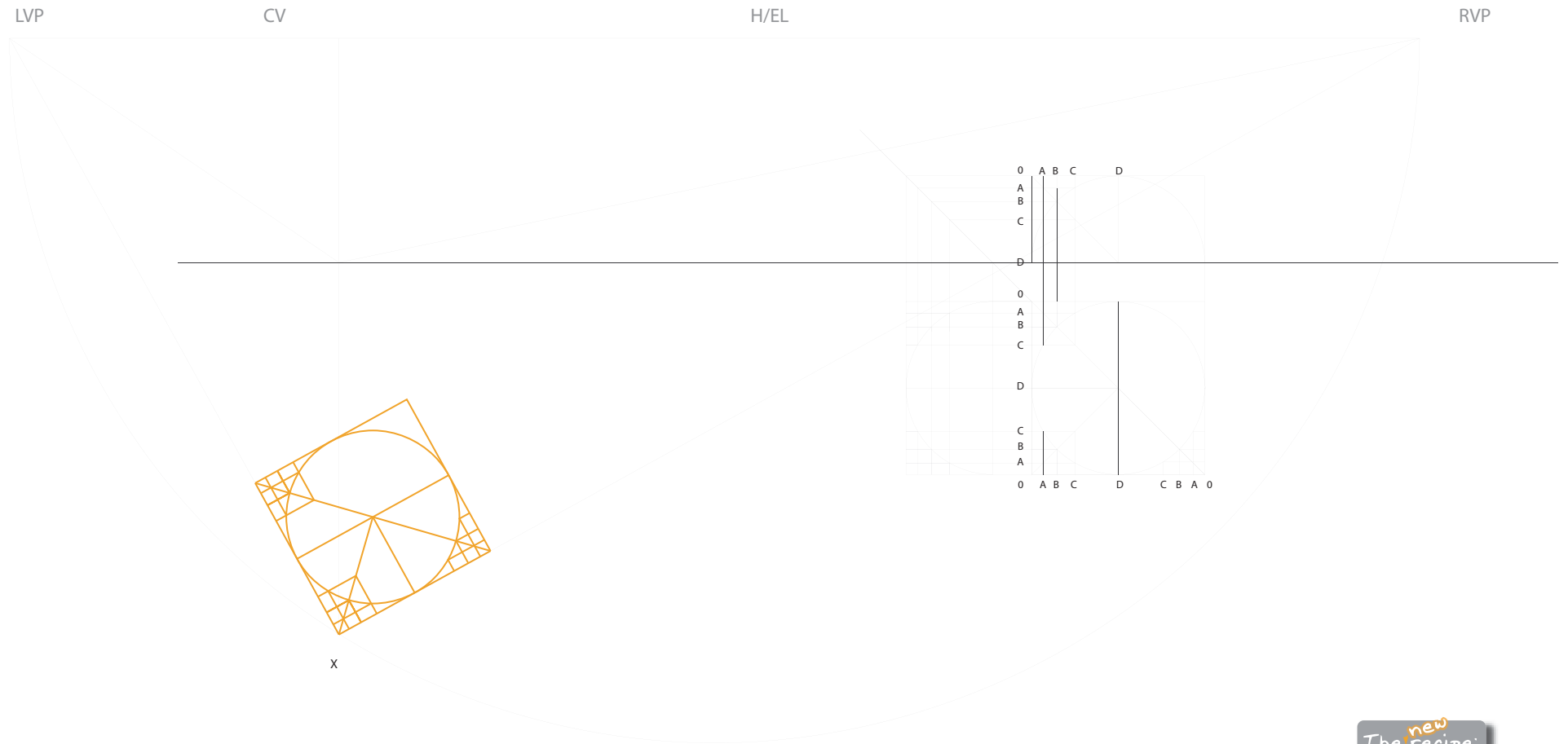
Rebecca B. Bennett



step 3
Grid off the circle and half circles and label them as you did the cylinder. This time use letters and not numbers for the vertical and horizontal axis. Note the new formula.

HOW TO DRAFT THE DOME

Rebecca B. Bennett

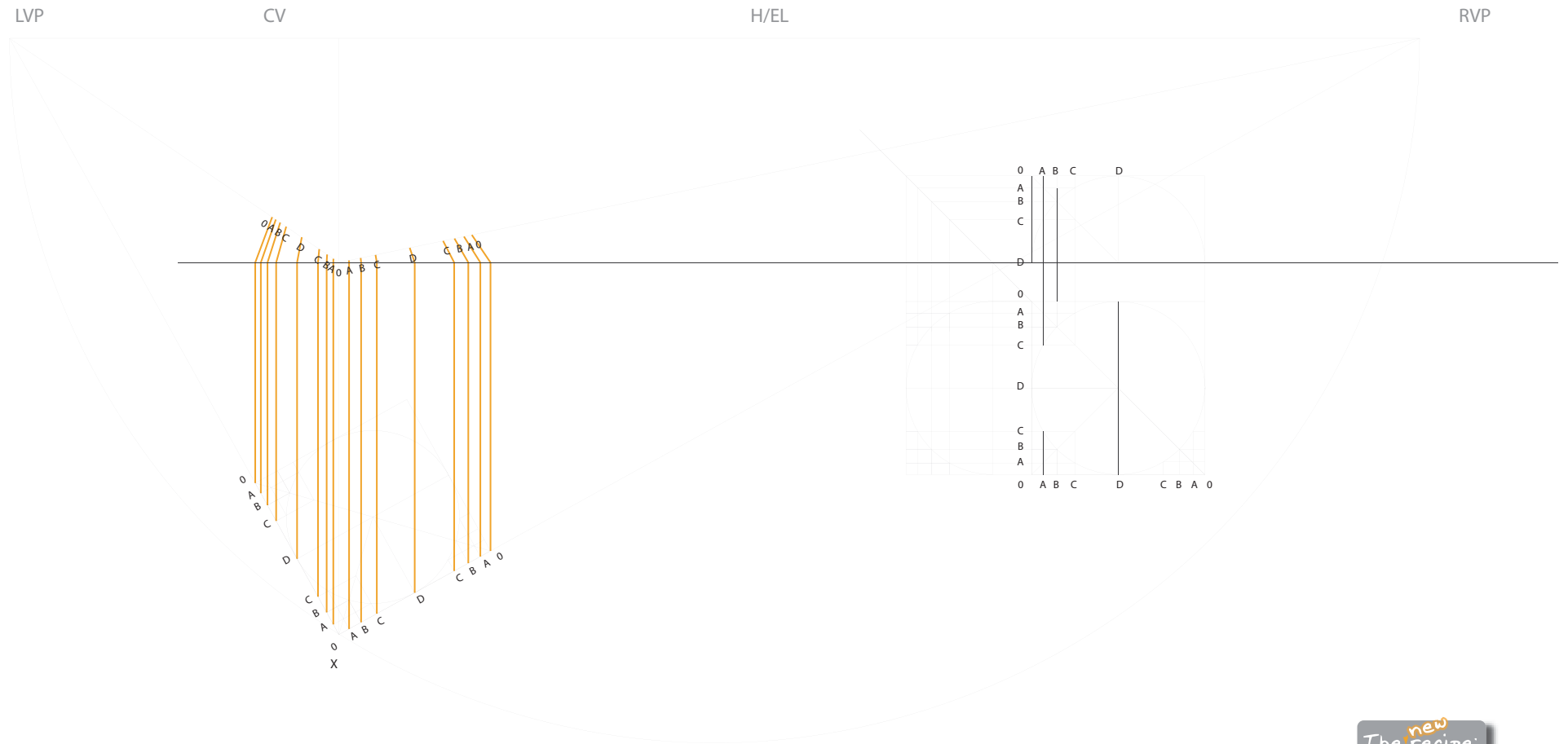


step 4
Using a compass, transfer the plan (with the grid) to plan X.

The ^{new} recipe:
0 meets D
A meets C
B meets B
C meets A
D meets 0

HOW TO DRAFT THE DOME

Rebecca B. Bennett

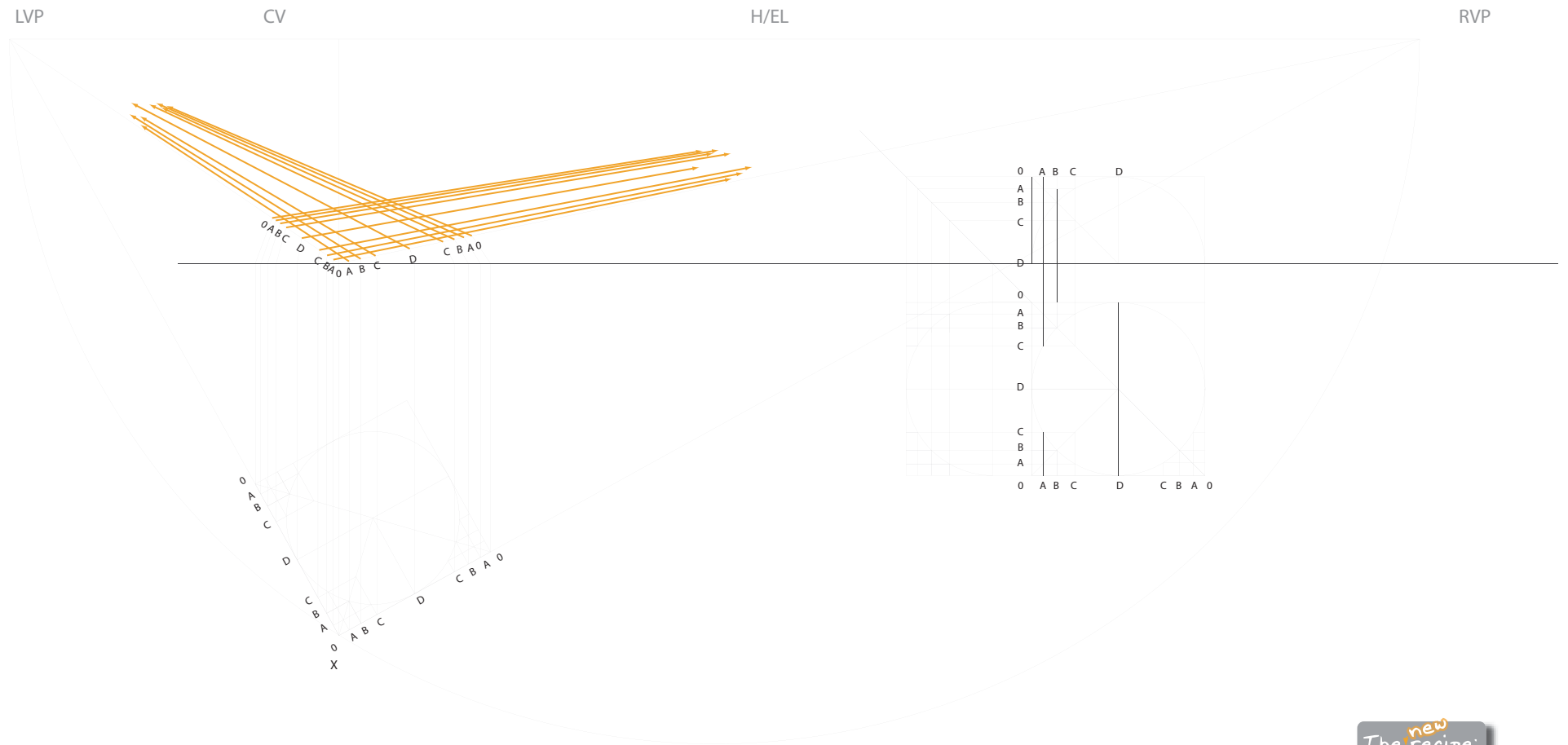


step 5
Bring points up to the GL and pitch the tent. Label the points in the 3D area.

The ^{new} recipe:
 0 meets D
 A meets C
 B meets B
 C meets A
 D meets 0

HOW TO DRAFT THE DOME

Rebecca B. Bennett

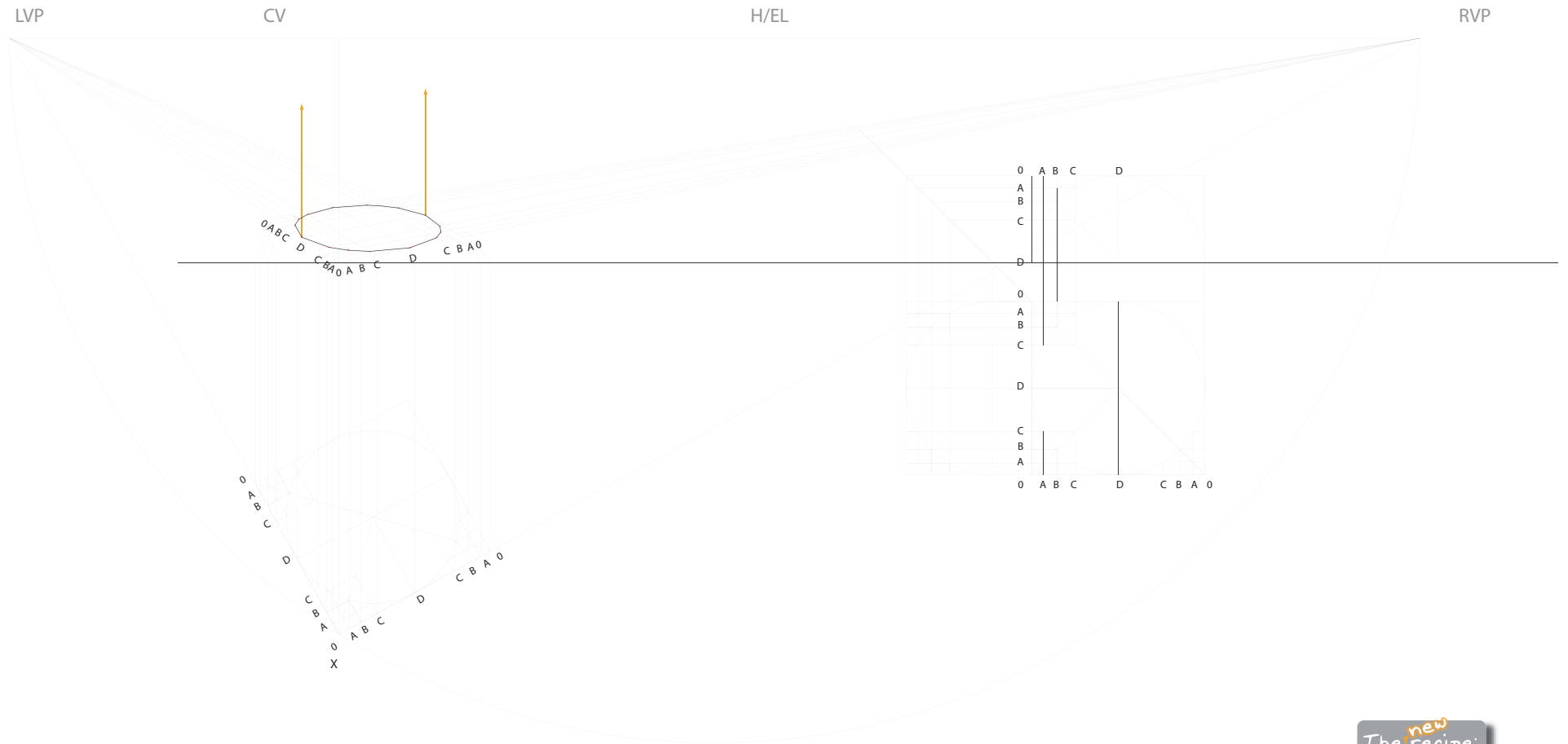


step 6
Send the points back to the VPs.

new
The recipe:
O meets D
A meets C
B meets B
C meets A
D meets O

HOW TO DRAFT THE DOME

Rebecca B. Bennett

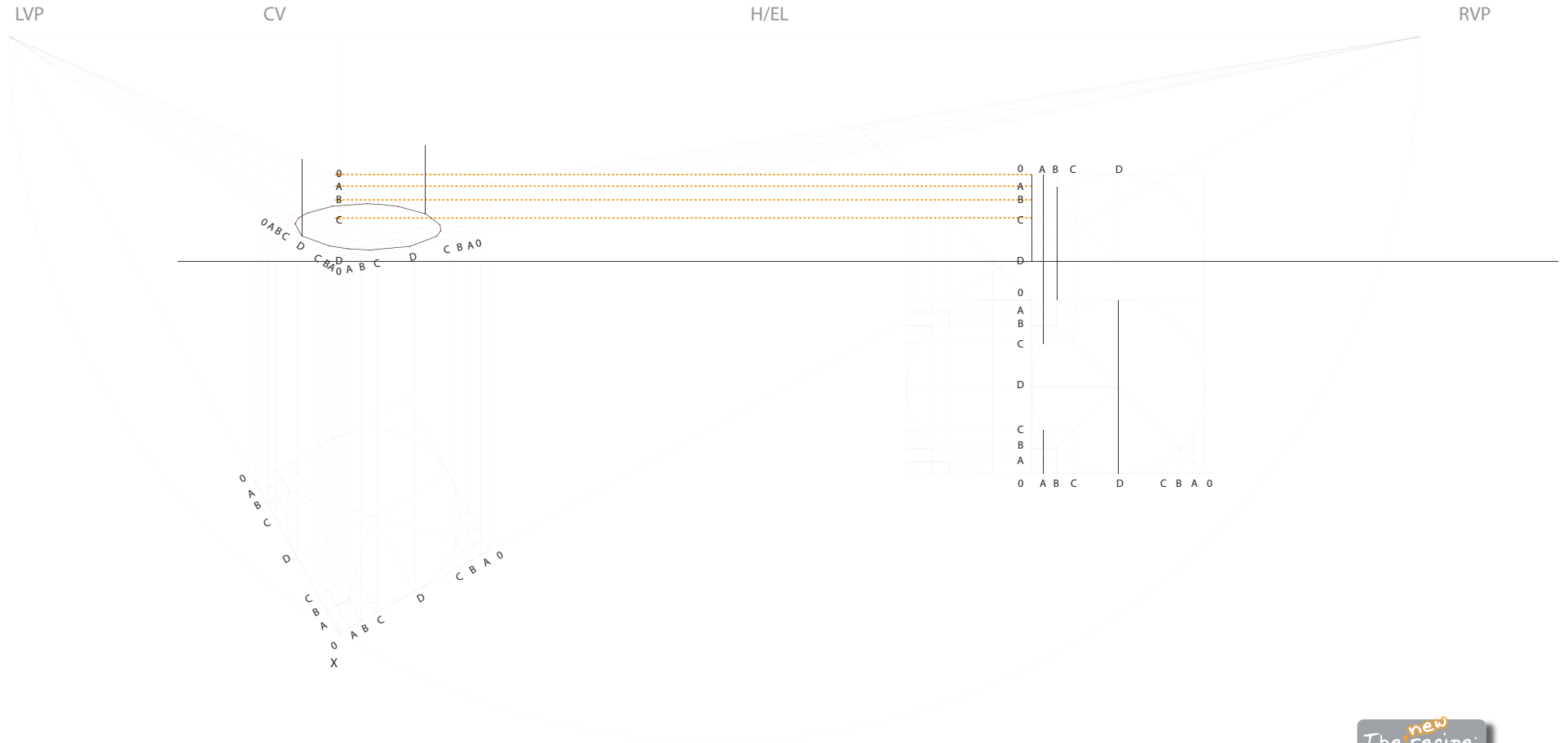


step 8
 Extend correspond lines from point "D" straight up.

new
 The recipe:
 O meets D
 A meets C
 B meets B
 C meets A
 D meets O

HOW TO DRAFT THE DOME

Rebecca B. Bennett

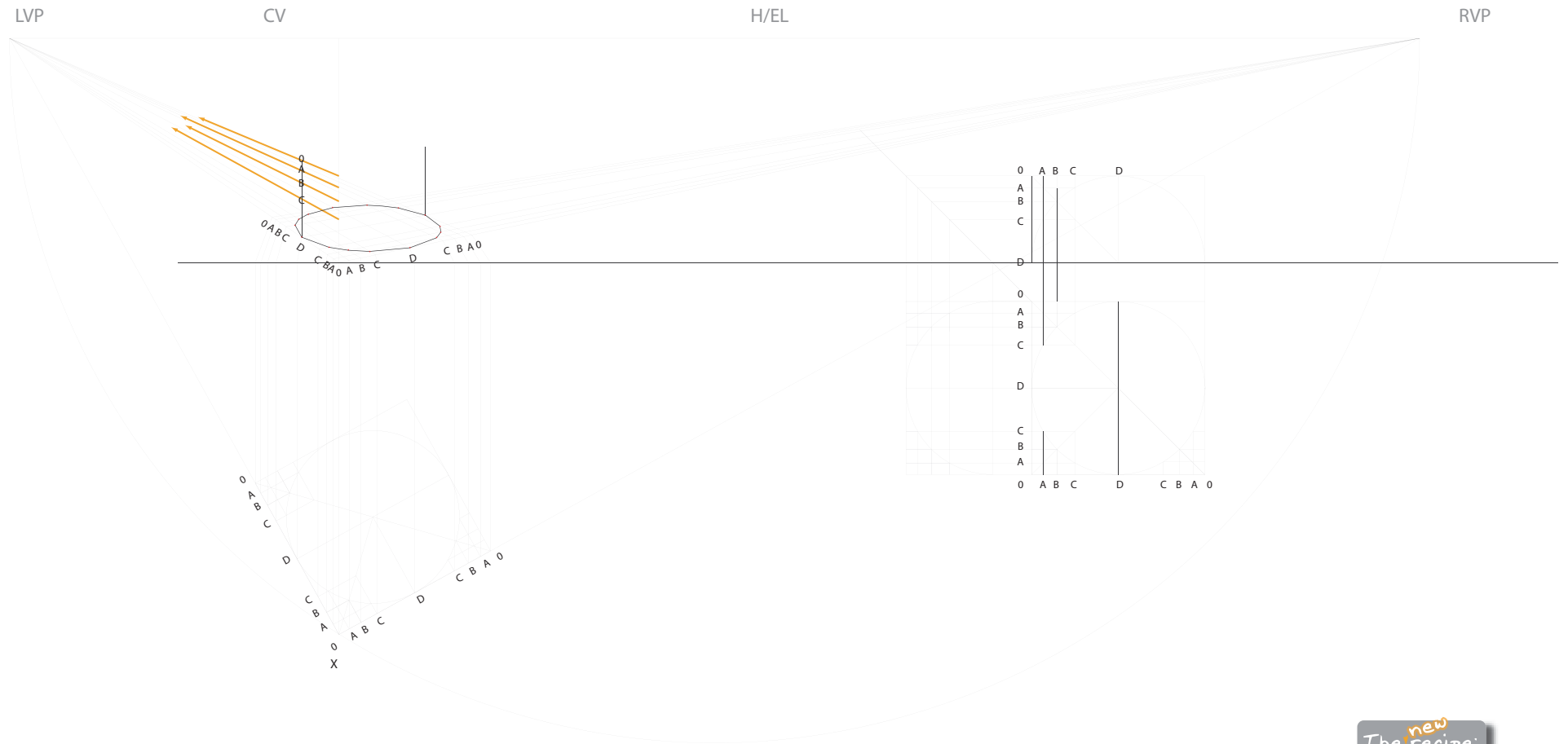


step 9
Transfer the elevation to line X.

The ^{new} recipe:
 O meets D
 A meets C
 B meets B
 C meets A
 D meets O

HOW TO DRAFT THE DOME

Rebecca B. Bennett

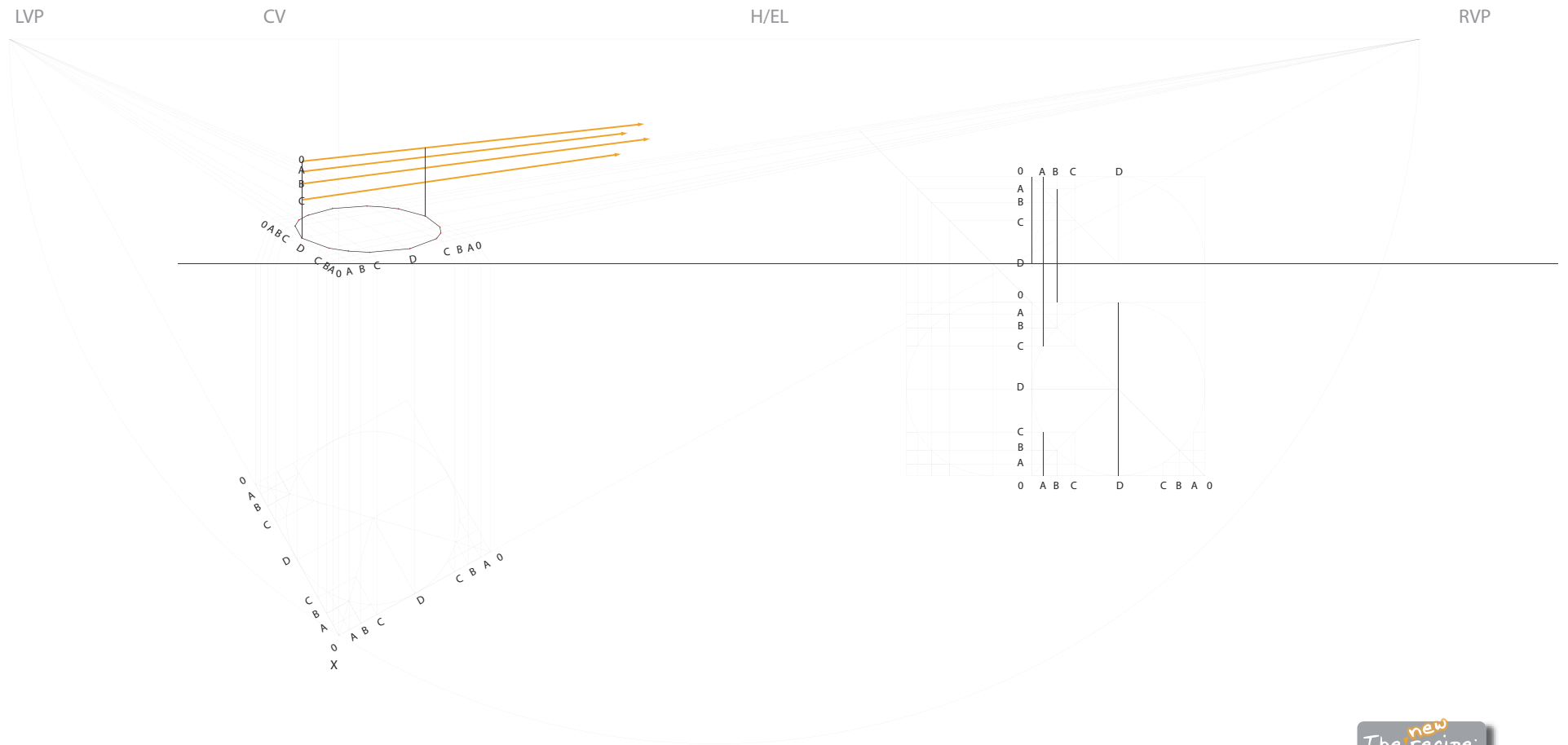


step 10
 Extend the intersections back to the VP. Label the points on this line.

The ^{new} recipe:
 0 meets D
 A meets C
 B meets B
 C meets A
 D meets 0

HOW TO DRAFT THE DOME

Rebecca B. Bennett

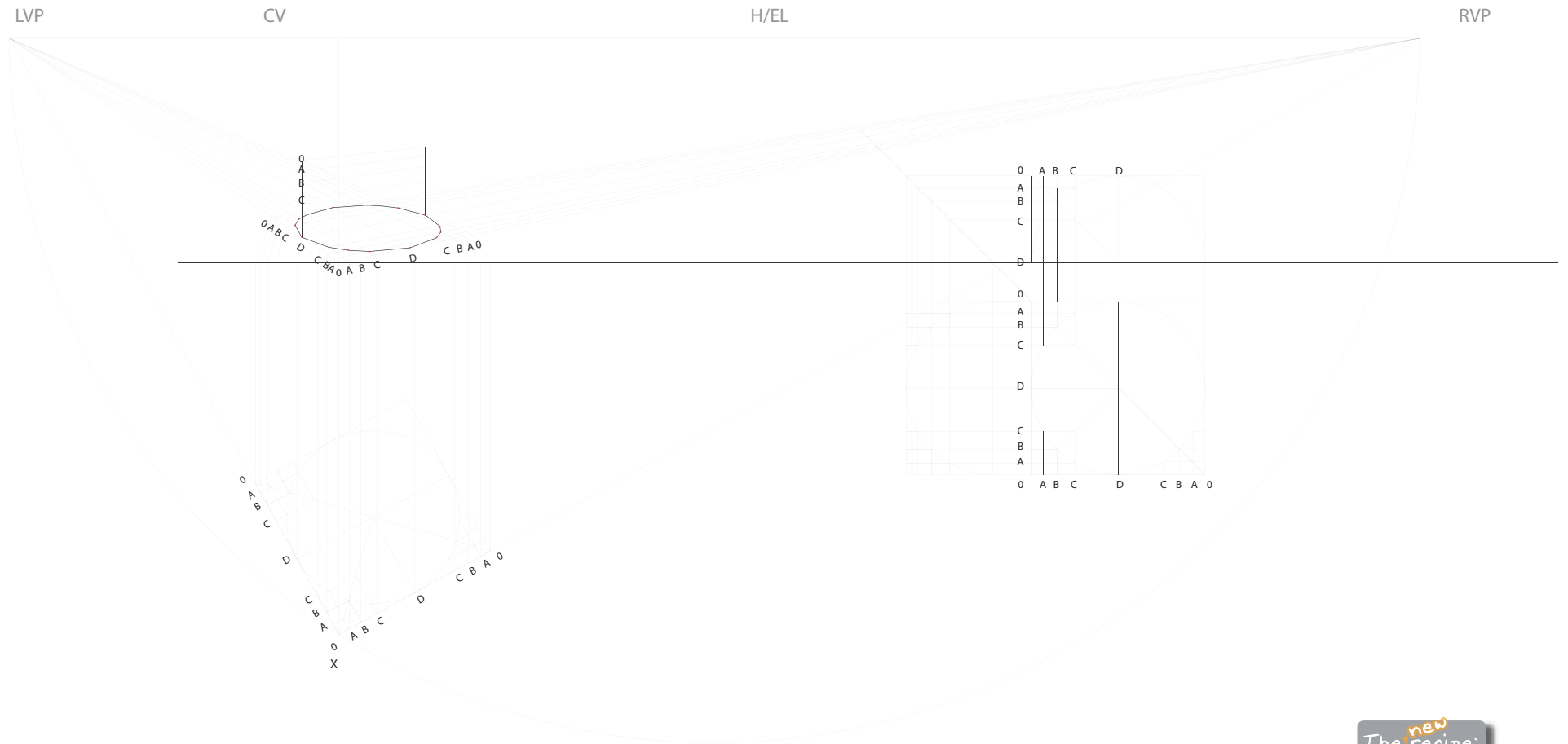


step 11
From the intersections on line D, extend lines to the opposite VP.

The ^{new} recipe:
 O meets D
 A meets C
 B meets B
 C meets A
 D meets O

HOW TO DRAFT THE DOME

Rebecca B. Bennett

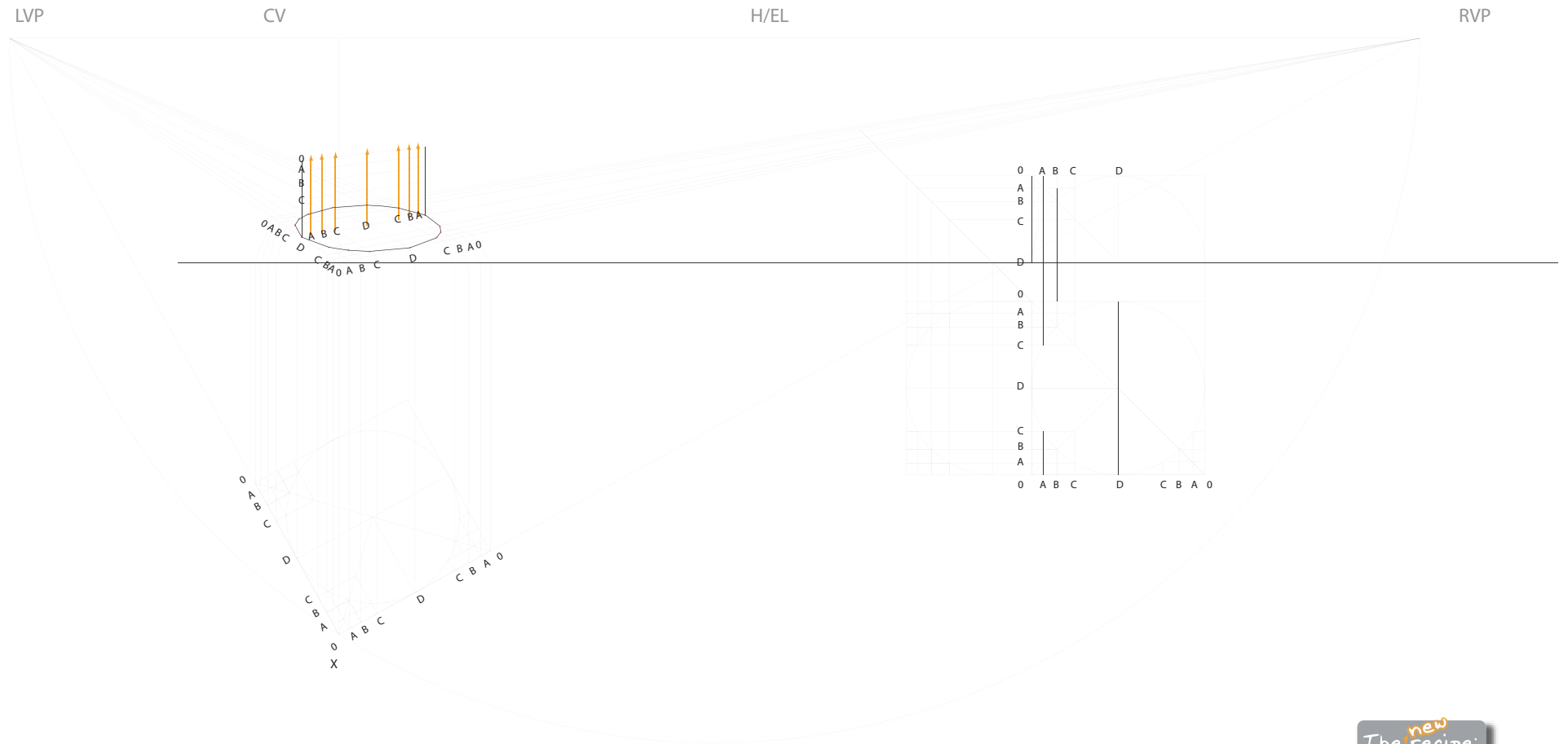


step 12
Label the points on the base line "D".

The ^{new} recipe:
o meets D
A meets C
B meets B
C meets A
D meets o

HOW TO DRAFT THE DOME

Rebecca B. Bennett

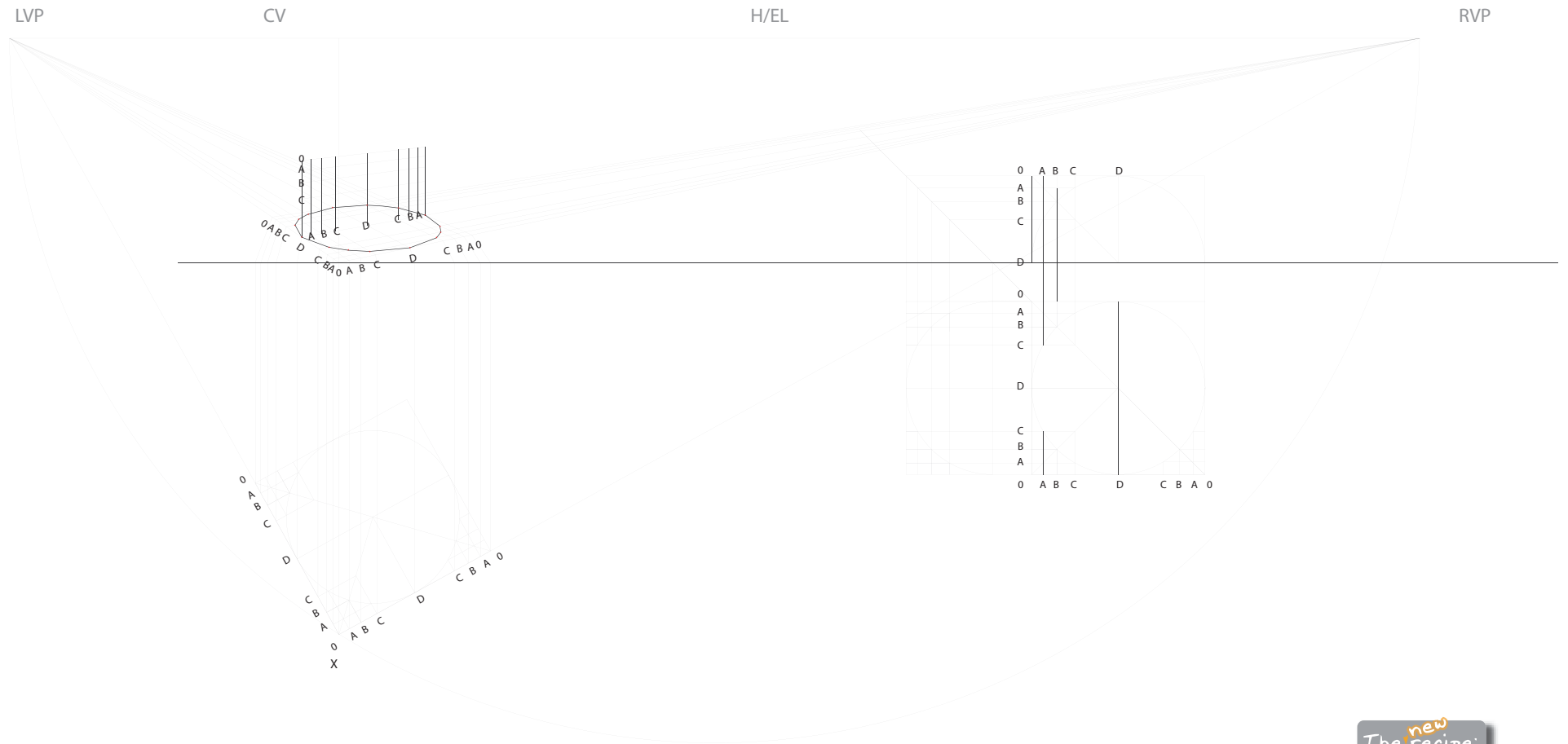


step 13
 Extend lines straight up from base line "D".

new
 The recipe:
 O meets D
 A meets C
 B meets B
 C meets A
 D meets O

HOW TO DRAFT THE DOME

Rebecca B. Bennett

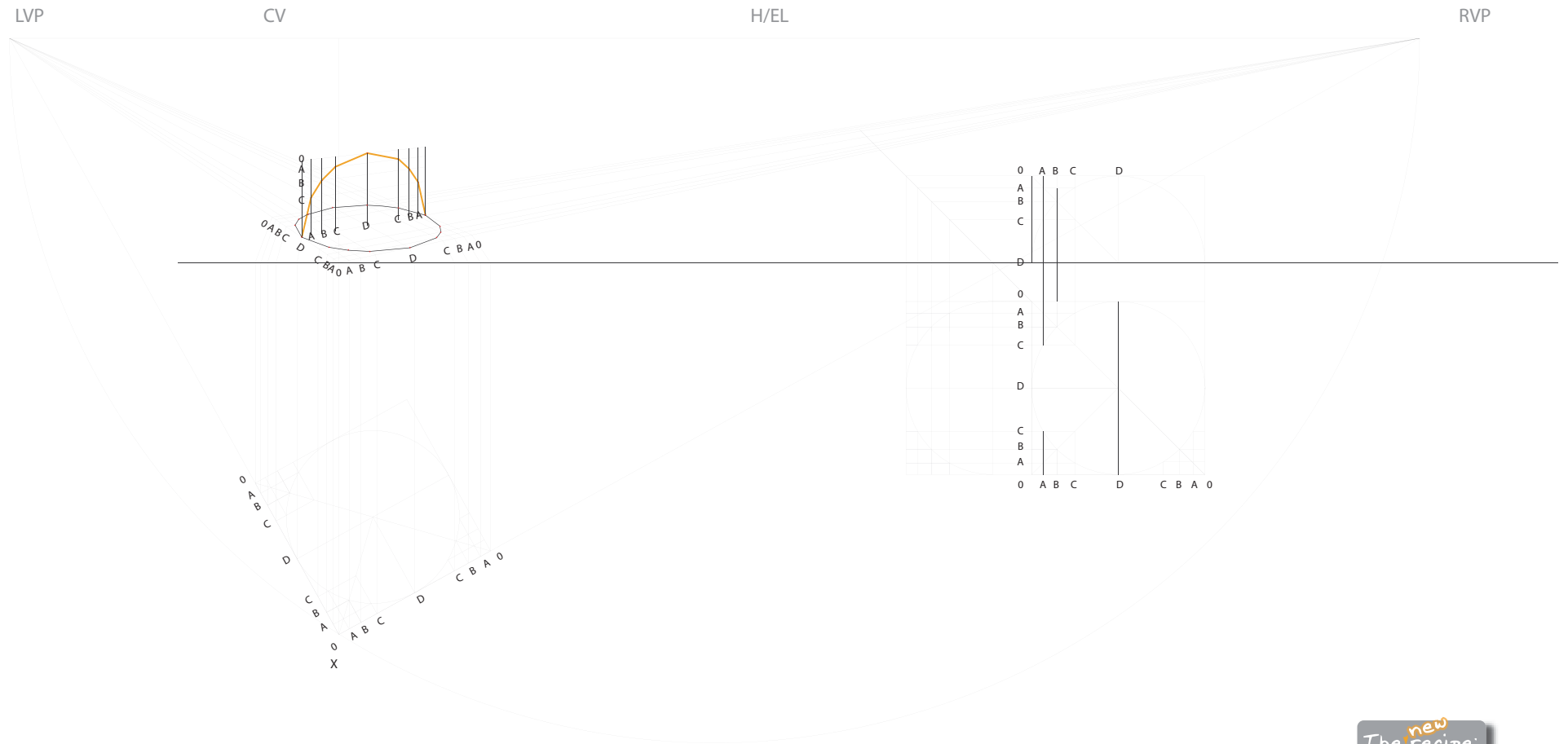


step 14
Using the recipe, find and mark the intersections.

new
The recipe:
O meets D
A meets C
B meets B
C meets A
D meets O

HOW TO DRAFT THE DOME

Rebecca B. Bennett

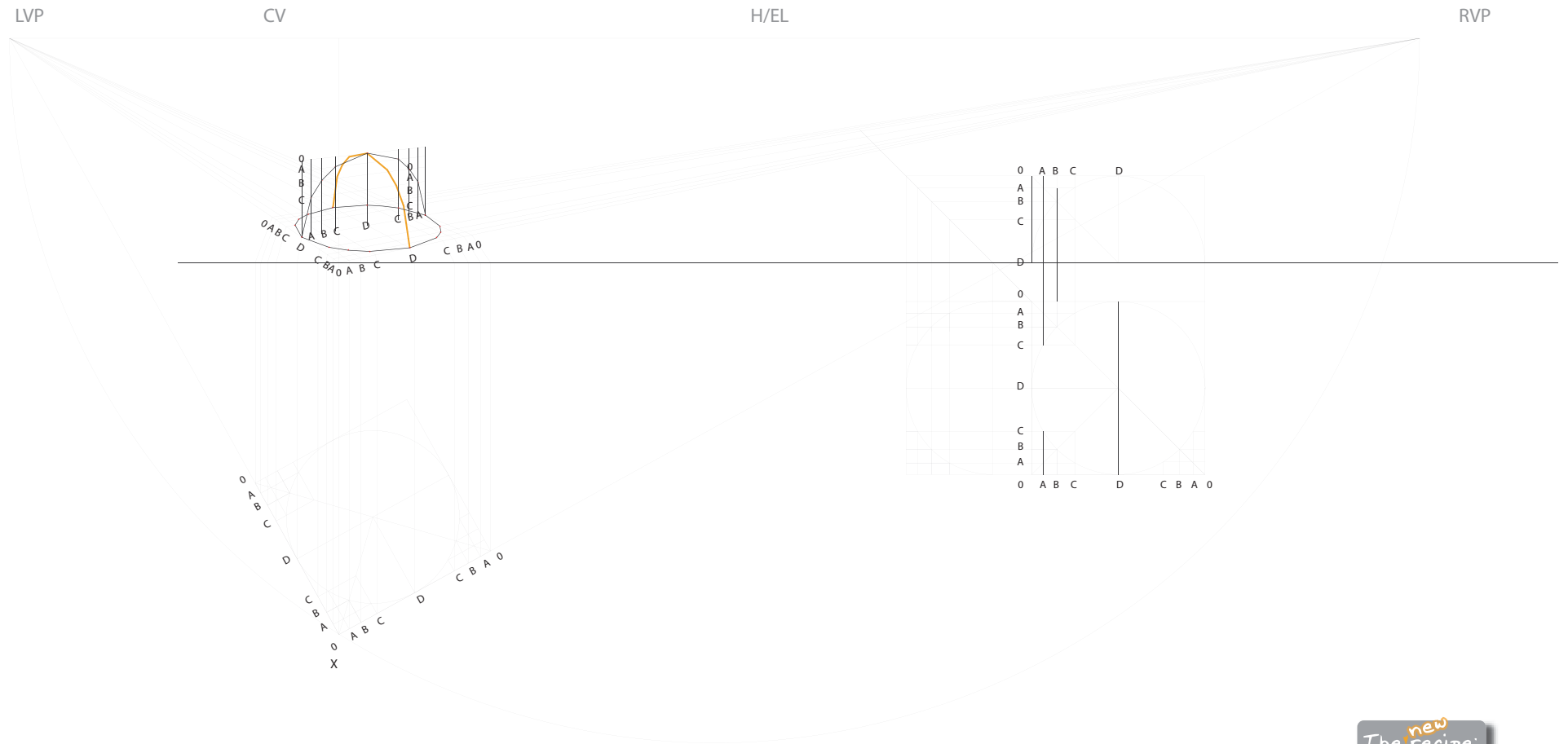


step 15
Connect the intersections.

The ^{new} recipe:
 0 meets D
 A meets C
 B meets B
 C meets A
 D meets 0

HOW TO DRAFT THE DOME

Rebecca B. Bennett

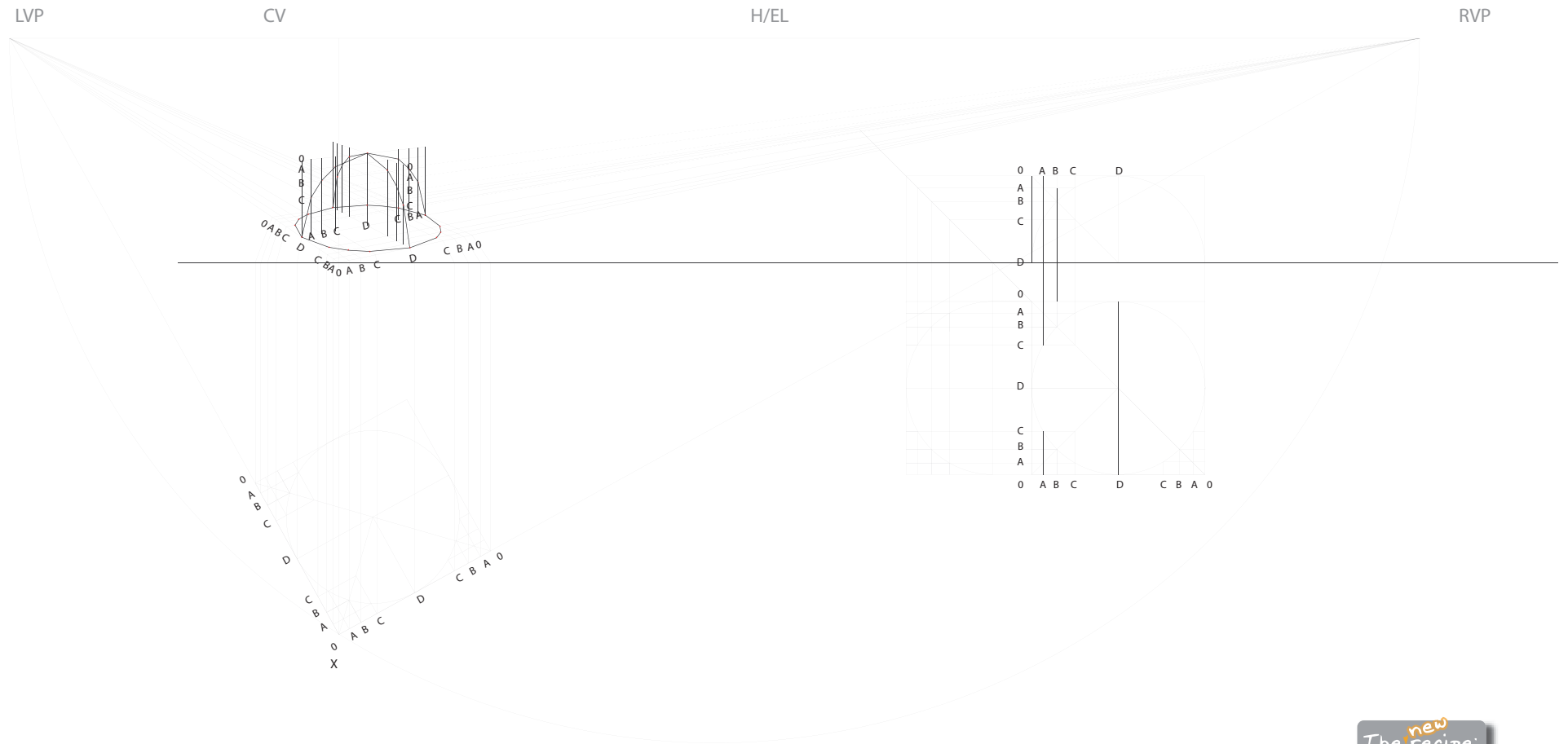


step 16
Following steps 8 – 15, find the second arc on the perpendicular plane.

The ^{new} recipe:
 O meets D
 A meets C
 B meets B
 C meets A
 D meets O

HOW TO DRAFT THE DOME

Rebecca B. Bennett



step 17
 Using the compass, the tip of which is placed at the intersection of the three planes, to draw the outer edge of the dome. The half circle should touch the outermost parts of the ellipses.

new
 The recipe:
 O meets D
 A meets C
 B meets B
 C meets A
 D meets O

