

# Orthographic vs. isometric essay

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If you've ever seen a drawing where the three dimensions of the object in the drawing are represented in three separate views, where each view shows one of the three planes from the object, that means you've seen an orthographic drawing. Now if you've ever seen a drawing where the 3D drawing shows all three of height, width, and depth of the object in a single perspective, and the viewpoint being at a 45 degree angle from each perpendicular plane of the orthographic view, then you've seen an Isometric drawing. Both drawings are used for Engineering. They just differ in multiple ways, evidently. One way being as Isometric shows a 3D view of the rendered object, all in one picture. They show the 3D object, with all the measurements of the planes in the drawing.

Orthographic, however, has four different views. There's the front plane, where it's drawn in 2 dimensions, showing the front. Then there's the back plane, showing the back in 2 dimensions. After that comes the left or right plane of the object, again in 2 dimensions. Then lastly comes the 3d version of the object, presented in 3 dimensions, like previously stated. Orthographic drawings and Isometric drawings really only differ in the ways it's drawn. For instance, if I were to draw a chair in both orthographic and isometric form, then in Orthographic I would draw all three planes; the front, back, and side planes.

And after drawing all three of those planes, in 2 dimensions, I would draw the chair in 3D. In Isometric, I would only draw it in 3D, therefore showing similarities, where both forms involve a three dimension drawing of the object.