



Math for the people, by the people.

isothetic

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A curve is *isothetic* if it consists entirely of lines parallel to one of the coordinate axes in a given rectilinear coordinate system. A polygon or polyhedron is isothetic if all of its edges are parallel to one of the coordinate axes.

An example of an isothetic polygon is the rectangle $\{(x, y) : x_1 \leq x \leq x_2, y_1 \leq y \leq y_2\}$ for some x_1, x_2, y_1, y_2 . Examples of non-isothetic shapes are the tilted square $\{(x, y, z) : |x| + |y| = 1\}$ and the bipyramid $\{(x, y, z) : |x| + |y| + |z| = 1\}$.

(This entry is here because I couldn't find a definition of isothetic on the web. If you know anything interesting about isothetic shapes, please adopt this entry!)