

Answer on Question #67107 – Math – Analytic Geometry

Question

If $(-3,4)$ lies on a curve that is symmetric with respect to the x -axis, then $(3,4)$ will also lie on the curve.

Solution

Symmetry with respect to the x -axis means that if (x, y) is on the graph, then $(x, -y)$ is on the graph.

Symmetry with respect to the y -axis means that if (x, y) is on the graph, then $(-x, y)$ is on the graph.

Thus, the given statement is false because if $(-3,4)$ lies on a curve that is symmetric with respect to the x -axis, then $(-3,-4)$ will also lie on the curve, it is not $(3,4)$.

Answer: False.