

Check your understanding

22. Is every plane $ax + by + cz + d = 0$ the graph of some function?

(a) Yes.

(b) No.

Answer: (b)

Explanation: A “vertical” plane with $c = 0$ cannot be the graph of a function because it fails the “vertical line test”. Also the equation $ax + by + d = 0$ cannot be written in the form $z = f(x, y)$ because it does not contain z .