The state $|s=2, m=-1\rangle_x$ is:

a. A state of definite spin
b. An eigenstate of $\hat{S}_x$
c. An eigenstate of $\hat{S}_z$
d. An eigenstate of $\hat{S}^2$
e. An orbital angular momentum state
f. An eigenstate of $\hat{L}^2$
g. An electron state
h. A state of a "spin 1" particle
i. A state that I could also represent with the notation $|+z\rangle$
j. An eigenvector of the $\hat{S}_x$ operator with eigenvalue $-\hbar$.
k. A state represented in the S_x basis.
l. A state represented in the S_z basis.