x_2

Let $Y = -1$ be O and $Y = 1$ be X

No - the classes are not linearly separable, so a linear SVC cannot classify the data

$(x_1, x_1 x_2)$

$(-1, 1) \rightarrow -1$

$(-1, -1) \rightarrow 1$

$(1, -1) \rightarrow 1$

$(1, 1) \rightarrow -1$

Yes - a linear SVC can now classify the data because it is linearly separable