

A perfect square trinomial is in the form $r^2 + 2rs + s^2$ or $r^2 - 2rs + s^2$. Although $9x^2 = (3x)^2$ and $4 = 2^2$, the middle term, $6x$, is not equal to $2 \cdot 3x \cdot 2$. So this is not a perfect square trinomial.