

$\text{member}(X, [1, 2]), X \bmod 2 == 0$

$X = 1$

$1 \bmod 2 == 0$

fail

$\text{member}(X, [2]), X \bmod 2 == 0$

$X = 2$

$2 \bmod 2 == 0$

yes ($X = 2$)

$\text{member}(X, []), X \bmod 2 == 0$

fail