

Problem 7. Is the function even, odd or neither? $f(x) = 4 \cos(2x) + 2 \csc(x)$

$\left. \begin{matrix} \sin \theta \\ \csc \theta \\ \tan \theta \\ \cot \theta \end{matrix} \right\}$ all odd
 $\left. \begin{matrix} \cos \theta \\ \sec \theta \end{matrix} \right\}$ are even
 opposite out minus signs
 absorb minus signs.

$$\begin{aligned}
 f(-x) &= 4 \cos(-2x) + 2 \csc(-x) \\
 &= 4 \cos(2x) - 2 \csc(x) \neq f(-x) \\
 &\neq f(x)
 \end{aligned}$$

Neither