

9.3 Other Trig Properties Notes

EQ: How can the remaining trig properties help us simplify trig expressions?

How are odd and even functions different?

Even
 $f(-x) =$

Odd
 $f(-x) =$

Ex. $f(x) = x^2$

ex. $f(x) = x^3$

$f(x)$

$f(x)$

$f(2)$

$f(2)$

$f(-2)$

$f(-2)$

ex. $\cos(-30^\circ)$

ex. $\sin\left(-\frac{\pi}{2}\right)$

How can cofunction properties change an expression?

cofunction-

sin
 csc
 tan

ex. $\sin(30^\circ)$

ex. $\sec(42^\circ)$

ex. $\cot\left(\frac{3\pi}{8}\right)$

How do I use sum and difference properties to simplify an expression?

Sum & Difference Properties

Show that $\cos(A+B) \neq \cos A + \cos B$ by letting $A = 30^\circ$ and $B = 90^\circ$

Ex. $\cos 34^\circ \cos 20^\circ + \sin 34^\circ \sin 20^\circ$

ex. $\cos(\pi + x)$

Summary