

Sec 7.2 Compound Angle Formulas

-We will determine rules for $\sin(a+b)$, $\sin(a-b)$, $\cos(a+b)$, $\cos(a-b)$

-We will be able to find exact trig values for several angles not in the special triangles!

Nov 30-1:41 PM

pg 394 - proof

Nov 15-11:07 AM

New ones...

See p399

$$\sin(x + y) = \sin x \cos y + \cos x \sin y$$

$$\sin(x - y) = \sin x \cos y - \cos x \sin y$$

$$\cos(x + y) = \cos x \cos y - \sin x \sin y$$

$$\cos(x - y) = \cos x \cos y + \sin x \sin y$$

$$\tan(x + y) = \frac{\tan x + \tan y}{1 - \tan x \tan y}$$


$$\tan(x - y) = \frac{\tan x - \tan y}{1 + \tan x \tan y}$$

Dec 5-8:59 PM

How do we use them?

Determine the exact value of $\sin(15^\circ)$

$$\sin(45^\circ - 30^\circ)$$


 Break the fraction into "known" values


$$\sin(x - y) = \sin x \cos y - \cos x \sin y$$

Dec 5-9:08 PM

How do we use them?

Determine the exact value of

$$\sin \frac{5\pi}{12}$$



Break the fraction into
"known" values

$$\sin(x + y) = \sin x \cos y + \cos x \sin y$$

Dec 5-9:08 PM

Find the exact value of:

$$\tan \frac{11\pi}{12}$$

May 13-3:19 PM

Homework
p400 #1, 2, 3cd, 4cd, 5abc,
6abf, 9ace

Dec 5-9:12 PM