

Name: _____

Date: _____

Instructions: Please complete the following problems for practice. Each answer is associated with a letter that creates a secret name. You can find the key on the last page.

Problem 1. Find the exact value of: $\cos(105^\circ) \sin(75^\circ)$

Problem 2. Find $\sin(32^\circ) - \sin(16^\circ)$

Problem 3. Use the sum-to-product to rewrite the expression: $\sin 10^\circ + \sin 6^\circ$

Problem 4. Evaluate: $\sin(67.5^\circ) \cos(22.5^\circ)$

Problem 5. Find the exact value of $\sin(195^\circ) \cdot \cos(45^\circ)$

Problem 6. True or False: $\sin x + \sin y = \sin(x + y)$

Problem 7. Fill in the blank: $\cos(3x) + \cos(5x) =$ _____

A	100
B	$-\frac{1}{4}$
C	$\cos(8x)$
D	$\frac{1}{2} + \frac{\sqrt{2}}{4}$
E	$\frac{-\sqrt{3}+1}{4}$
F	$\sin(16^\circ)$
G	$\cos(90^\circ)$
H	$\frac{1}{2}$
I	True
J	$\frac{1}{28}$
K	10
L	False
L	$2 \cos(4x) \cos(x)$
M	$2 \cos(8x) \cos(16x)$
N	$2 \cos(4x) \sin(x)$
O	$\frac{2}{3}$
P	$\frac{\tan(A) - \tan(B)}{1 + \tan(A) \tan(B)}$
Q	$\frac{-1}{2}$
R	$2 \sin(8^\circ) \cos(2^\circ)$
S	1
T	$\frac{\sqrt{6} + \sqrt{2}}{4}$
U	$2 \sin(8^\circ) \cos(24^\circ)$
V	$\cos(x)$
W	$\sin(x)$
X	$\frac{5}{13}$
Y	$\frac{4}{13}$
Z	$\frac{12}{13}$

What was the name found?
