

Decode the Joke

Trigonometric Ratios

Express each of the following as the trigonometric ratio of an acute angle.

A	$\sin 400$	$\sin 40$
B	$\cos(-300)$	$\cos 60$
C	$\tan 260$	$\tan 80$
D	$\cos 750$	$\cos 30$
E	$\tan 410$	$\tan 50$
F	$\sin(-700)$	$\sin 20$
G	$\tan(-290)$	$\tan 70$
H	$\cos(-315)$	$\cos 45$
I	$\sin 125$	$\sin 55$
J	$\tan 195$	$\tan 15$
K	$\cos 320$	$\cos 40$
L	$\cos 125$	$-\cos 55$
M	$\tan(-25)$	$-\tan 25$

N	$\cos 355$	$\cos 5$
O	$\sin 245$	$-\sin 65$
P	$\tan(100)$	$-\tan 80$
Q	$\cos(-75)$	$\cos 75$
R	$\sin(-105)$	$-\sin 75$
S	$\cos 200$	$-\cos 20$
T	$\tan(-505)$	$\tan 35$
U	$\sin 1280$	$-\sin 20$
V	$\tan 330$	$-\tan 30$
W	$\cos(-275)$	$\cos 85$
X	$\sin(-555)$	$\sin 15$
Y	$\tan 1075$	$-\tan 5$
Z	$\cos(-980)$	$-\cos 80$

Now decode the joke...

$\cos 85$	$\cos 45$	$-\tan 5$		$\cos 30$	$\sin 55$	$\cos 30$		$\tan 35$	$\cos 45$	$\tan 50$
W	H	Y		D	I	D		T	H	E

$-\cos 20$	$\tan 35$	$-\sin 20$	$\cos 30$	$\tan 50$	$\cos 5$	$\tan 35$		$\cos 30$	$\sin 55$	$-\tan 30$
S	T	U	D	E	N	T		D	I	V

$\sin 55$	$\cos 30$	$\tan 50$		$-\cos 20$	$\sin 55$	$\cos 5$		$\cos 60$	$-\tan 5$		$\tan 35$
I	D	E		S	I	N		B	Y		T

$\sin 40$	$\cos 5$?		$\tan 15$	$-\sin 20$	$-\cos 20$	$\tan 35$		$\tan 80$	$-\sin 65$	$-\cos 20$
A	N	?		J	U	S	T		C	O	S