Trigonometric Functions:
Always, Sometimes, Never True?

$2 + \sin\theta = 2$	$\cos\theta = \cos(-\theta)$	$\sin\theta + \cos\theta = 1$
$\cos(300) = \cos(60)$	$\cos(50) = \cos(-50)$	$\tan(\theta + 180) = \tan\theta$
$\sin\theta = \sin(-\theta)$	$\tan\theta + 180 = \tan\theta$	$\sin(\theta + 180) = \sin\theta$
$\sin\theta = -\sin(-\theta)$	$\sin(20) = \sin(160)$	$\sin\theta = \cos\theta$
$4\sin^2\theta - 1 = 0$	$\tan(60) = \tan(-60)$	$\sin(\theta - 360) = \sin\theta$
$\cos(\theta + 360) = \cos\theta$	$4\sin^2\theta\cos\theta = \tan^2\theta$	$\sin\theta = \tan\theta$

Answers

Always True

$\cos\theta = \cos(-\theta)$

$\cos(300) = \cos(60)$

$\cos(50) = \cos(-50)$

$\tan(\theta + 180) = \tan\theta$

$\sin\theta = -\sin(-\theta)$

$\sin(20) = \sin(160)$

$\sin(\theta - 360) = \sin\theta$

$\cos(\theta + 360) = \cos\theta$

Sometimes True

$2 + \sin\theta = 2$ (if $\theta=0$ or 360)

$\sin\theta + \cos\theta = 1$ (if $\theta=90$ or 360)

$\sin\theta = \sin(-\theta)$ (if $\theta=0$ or 180)

$\sin(\theta + 180) = \sin\theta$ (if $\theta=0$ or 540)

$\sin\theta = \cos\theta$ (if $\theta=45$)

$4\sin^2\theta - 1 = 0$ (if $\theta=30$)

$\sin\theta = \tan\theta$ (if $\theta=0$)

$4\sin^2\theta\cos\theta = \tan^2\theta$ (if $\theta=51$)

Never True

$\tan(60) = \tan(-60)$

$\tan\theta + 180 = \tan\theta$