

Warm-up: Avoiding Horizontal Reflections

Original Equation	New Equation
$y = 2\sin(-x)$	
$y = -2\sin(-x)$	
$y = 2\cos(-x)$	
$y = -2\cos(-x)$	

Next ... factor out the negative in each expression:

$$-x - \pi =$$

$$-3\theta + 45^\circ =$$

$$-x - \pi/4 =$$

$$-2\theta + 180^\circ =$$

So ... now rewrite these equations to avoid a horizontal reflection!

Original Equation	New Equation
$y = 2\sin(-x - \pi)$	
$y = -2\sin(-3\theta + 45^\circ)$	
$y = 2\cos(-x - \pi/4)$	
$y = -2\cos(-2\theta + 180^\circ)$	