

Warm-up:

State, in radians, the reference angle for each of the following.

1.  $\frac{5\pi}{6}$

2.  $\frac{5\pi}{6}$

3.  $\frac{8\pi}{15}$

4. What's the period for  $y = -2 + 4\sin 3\left(x - \frac{\pi}{2}\right)$

5. What's the phase shift for  $y = -2 + 4\sin\left(2x + \frac{\pi}{2}\right)$

6. Graph:  $y = 2\cos x - \sin 2x$