

Graph 1 period of the function without using your calculator.

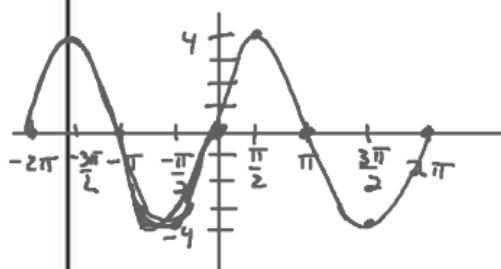
A) $y = 3 \sin \frac{x}{2}$

$y = 5 \cos 2x$

Identify the maximum and minimum values and the zeros of the function in the interval $[-2\pi, 2\pi]$. Use your understanding of transformations, not your calculator.

A) $y = 4 \sin x$ Amp = 4
 Per = 2π

B) $y = -2 \cos \frac{x}{3}$ Amp = 2
 Per = 6π



min $(0, -2)$ $(6\pi, -2)$
 $(-6\pi, -2)$
 max $(3\pi, 2)$ $(-3\pi, 2)$

Zero $\frac{3\pi}{2}, \frac{9\pi}{2}$
 $-\frac{3\pi}{2}, -\frac{9\pi}{2}$

max $\rightarrow (\frac{\pi}{2}, 4), (-\frac{3\pi}{2}, 4)$

min $\rightarrow (\frac{3\pi}{2}, -4), (-\frac{\pi}{2}, -4)$

Zeros $\rightarrow -2\pi, -\pi, 0,$
 $\pi, 2\pi$