

Homework #47

Answers

From Houghton-Mifflin

3rd Edition

p330:

1) $y = 3 \sin 2x$

amplitude = 3, period = $2\pi/2 = \pi$

2) $y = 2 \cos 3x$

amplitude = 2, period = $2\pi/3$

3) $y = (5/2) \cos (x/2)$

amplitude = $5/2$, period = $(2\pi)/(1/2) = 4\pi$

4) $y = -3 \sin (x/3)$

amplitude = 3, period = $(2\pi)/(1/3) = 6\pi$

5) $y = (2/3) \sin \pi x$

amplitude = $2/3$, period = $2\pi/2 = \pi$

6) $y = (3/2) \cos (\pi x)/2$

amplitude = $3/2$, period = $(2\pi)/(\pi/2) = 4$

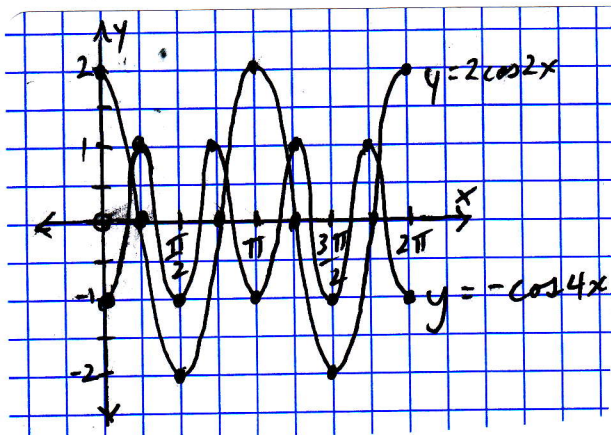
30) $f(x) = 2 \cos 2x$

amplitude = 2, period = π

$g(x) = -\cos 4x$

amplitude = 1, period = $\pi/2$

Graph:



Plus Worksheet #47