

p 378 3-54 (mults of 3)

$$(3) y = \frac{5}{2} \cos \frac{x}{2}$$
$$p = \frac{2\pi}{\frac{1}{2}} = 4\pi$$
$$a = \frac{5}{2}$$

$$(6) y = \frac{3}{2} \cos \frac{\pi x}{2}$$
$$p = \frac{2\pi}{\frac{\pi}{2}} = \frac{2\pi}{1} \cdot \frac{2}{\pi} = 2$$
$$a = \frac{3}{2}$$

$$(9) y = 3 \sin 10x$$
$$p = \frac{2\pi}{10} = \frac{\pi}{5}$$
$$a = 3$$

$$(12) y = \frac{5}{2} \cos \frac{x}{4}$$
$$p = \frac{2\pi}{\frac{1}{4}} = 8\pi$$
$$a = \frac{5}{2}$$

$$(15) f(x) = \sin x$$
$$g(x) = \sin(x - \pi)$$

shift to right of  $\pi$

$$(18) f(x) = \sin 3x$$
$$g(x) = \sin(-3x)$$

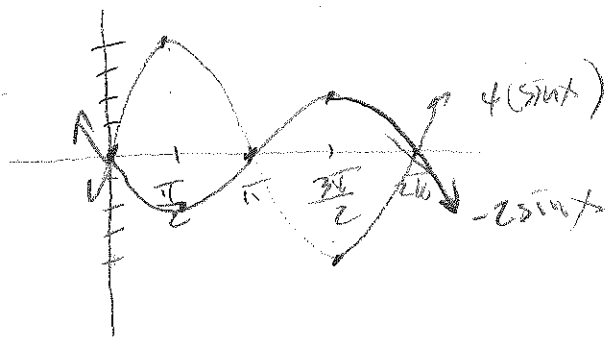
reflection over y-axis

$$(21) f(x) = \sin 2x$$
$$g(x) = 3 + \sin 2x$$

shift up 3 units

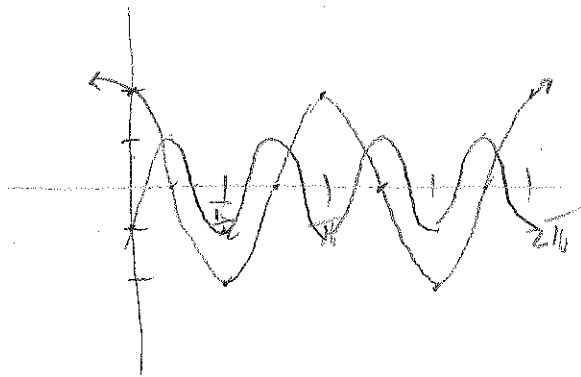
$$(24) p = \frac{5}{2}$$

$$(27) f(x) = -2 \sin x$$
$$g(x) = 4 \sin x$$

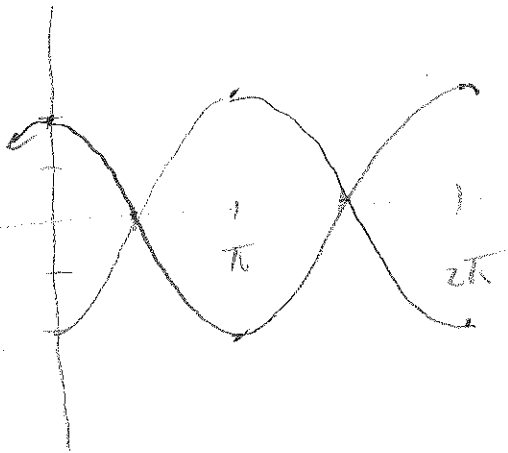


$$(30) f(x) = 2 \cos 2x$$
$$g(x) = -\cos 4x$$

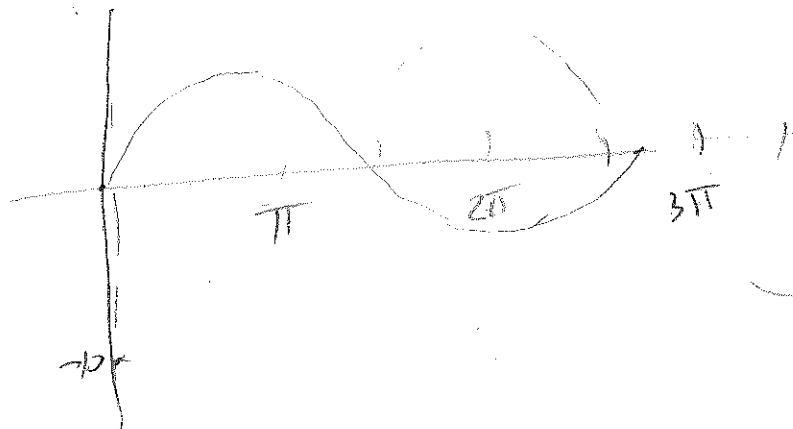
$\frac{2\pi}{4} = \frac{\pi}{2}$



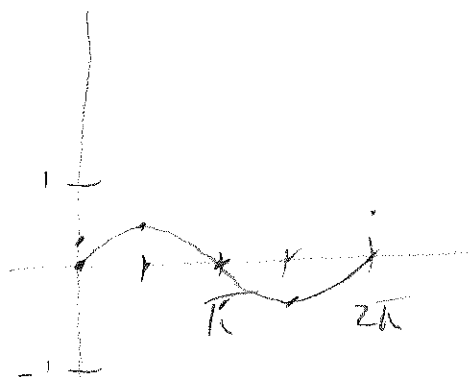
33  $f(x) = 2 \cos x$   
 $g(x) = 2 \cos(x + \pi)$



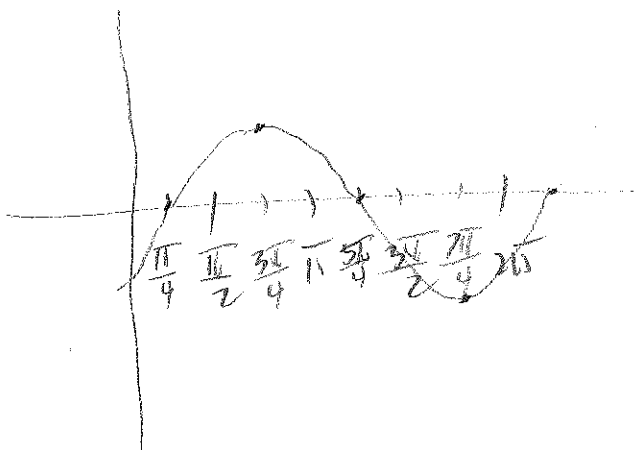
42  $y = \sin \frac{\pi x}{4}$   $P = \frac{2\pi}{\frac{\pi}{4}} = 8$



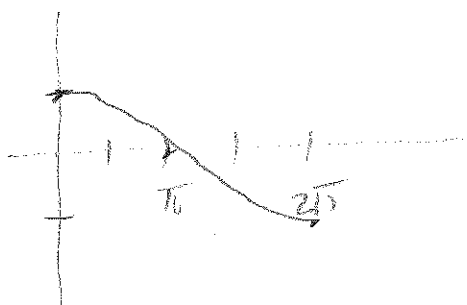
36  $y = \frac{1}{4} \sin x$



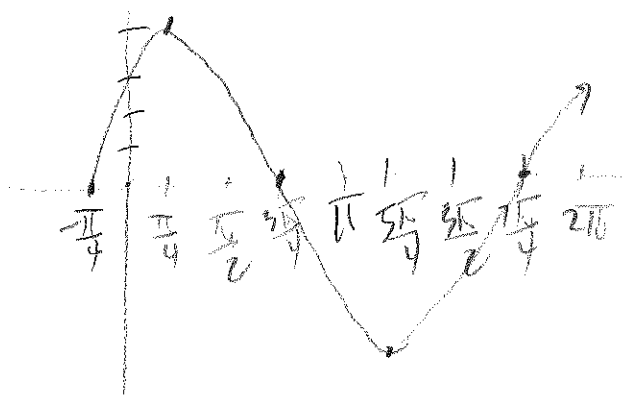
45  $y = \sin(x - \frac{\pi}{4})$



39  $y = \cos \frac{x}{2}$   
 $P = \frac{2\pi}{\frac{1}{2}} = 4\pi$

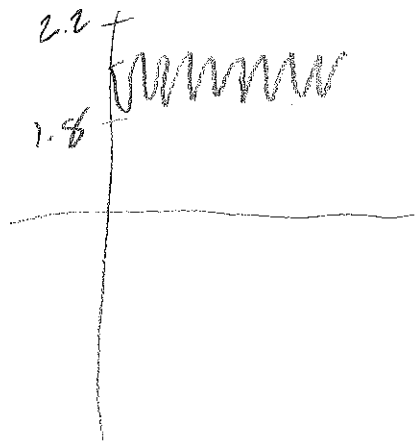


46  $y = 4 \cos(x + \frac{\pi}{4})$



(51)  $2 + \frac{1}{10} \cos 60\pi x$

$p = \frac{2\pi}{60\pi} = \frac{1}{30}$



(54)  $y = 4 \cos(x + \frac{\pi}{4}) + 4$

