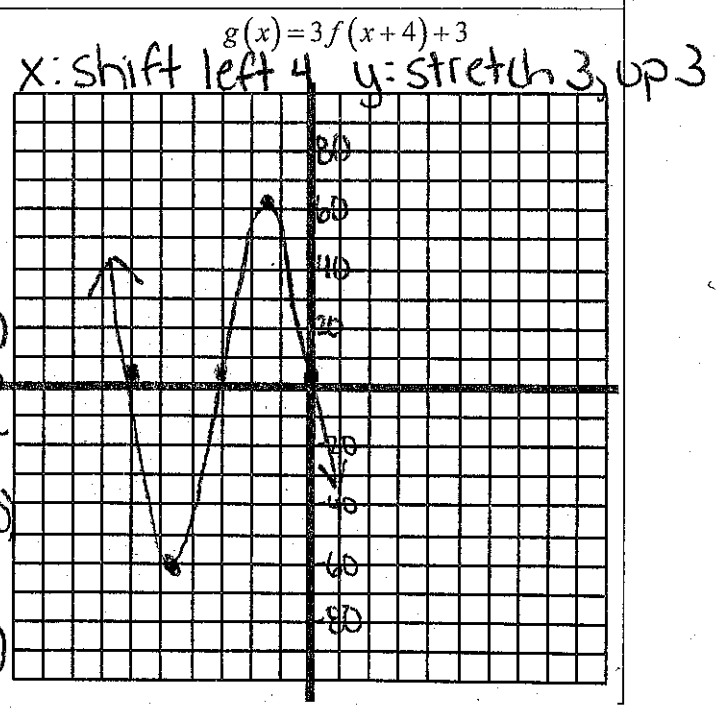
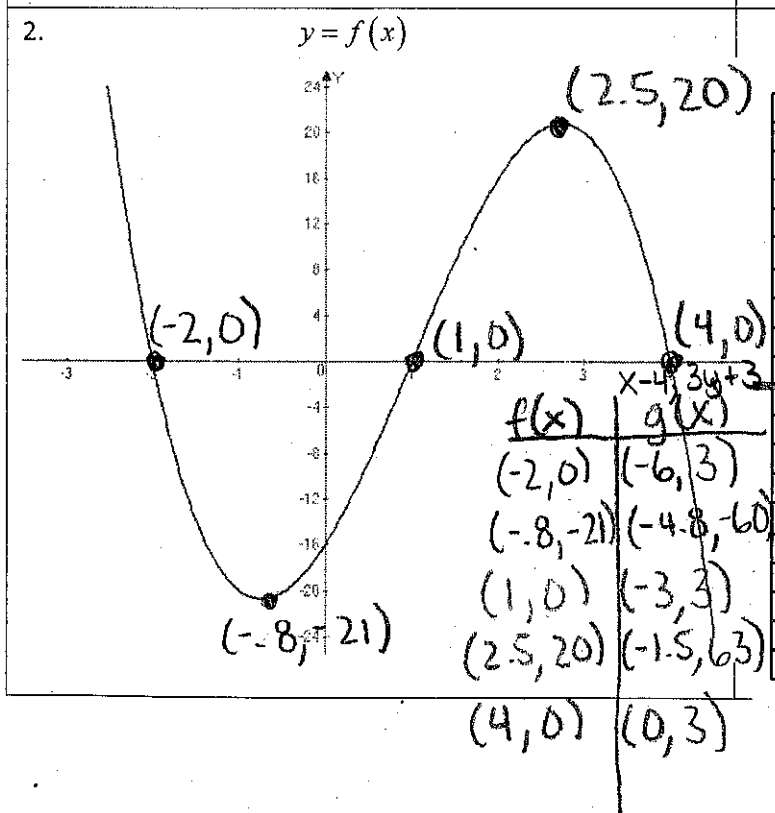
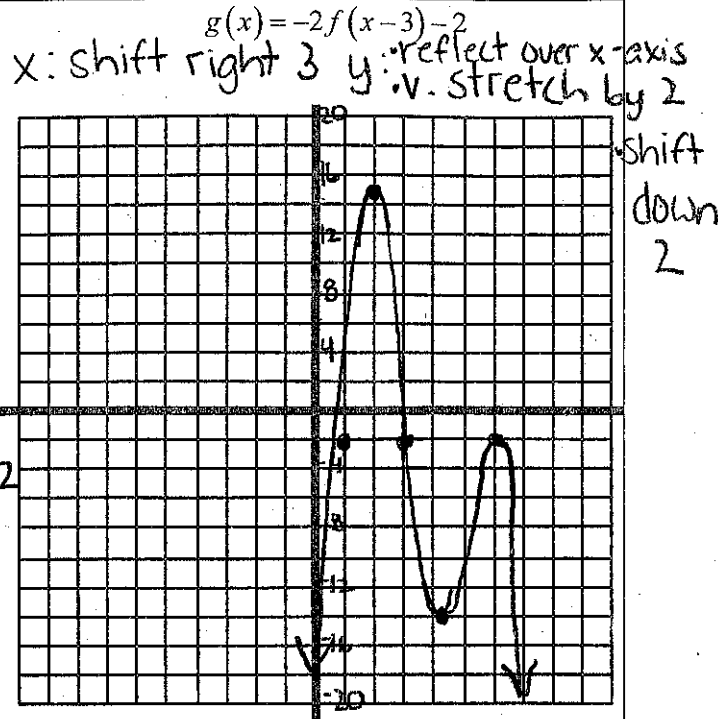
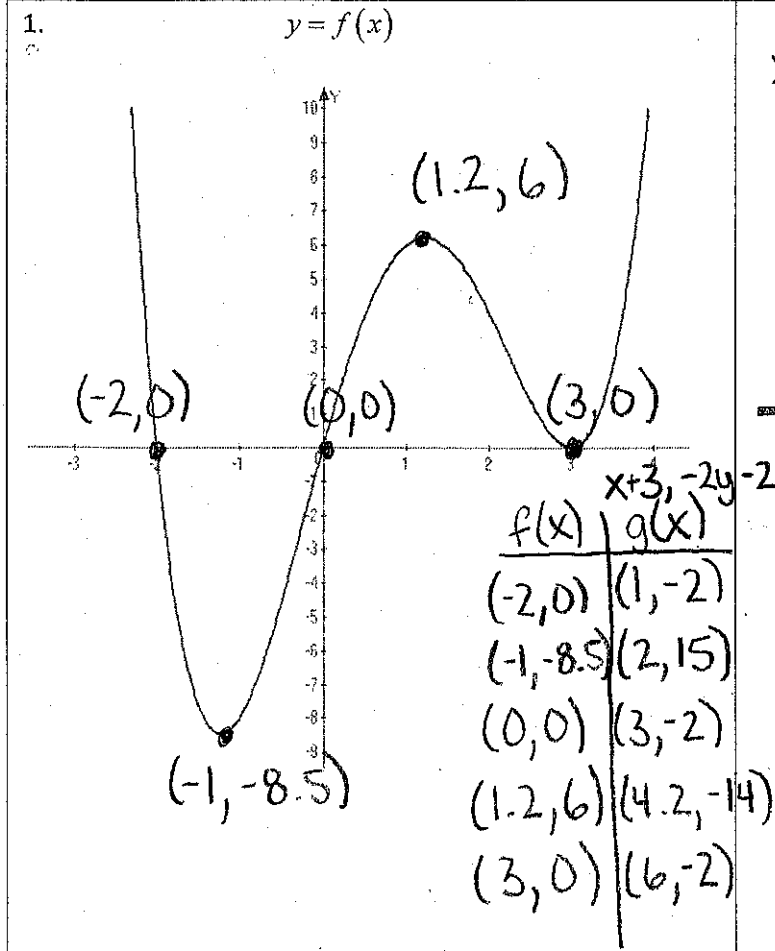
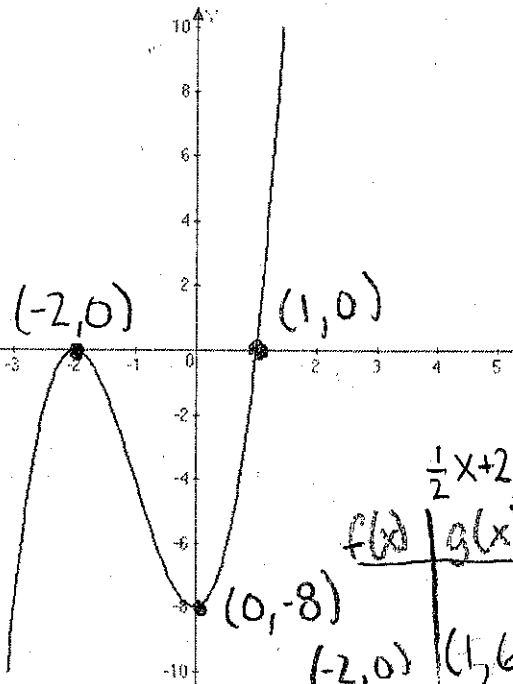


Use the graph of  $f(x)$  to sketch the graph of  $g(x)$ .



3.

$y = f(x)$



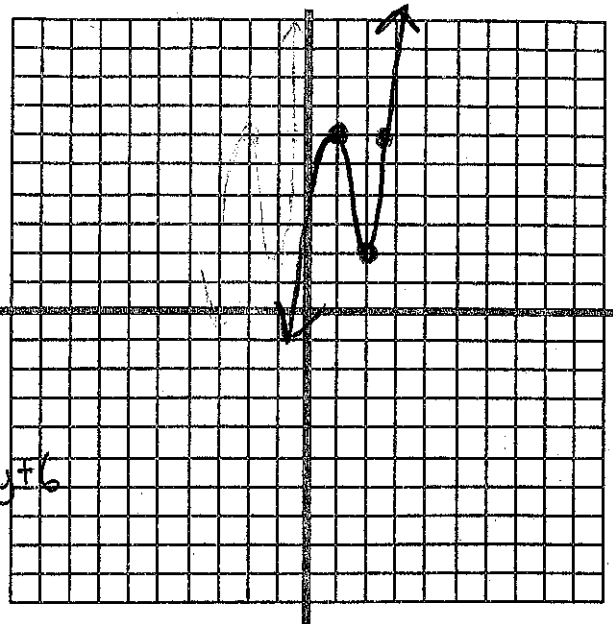
$\frac{1}{2}x + 2, \frac{1}{2}y + 6$

$f(x)$	$g(x)$
$(-2, 0)$	$(1, 6)$
$(0, -8)$	$(2, 2)$
$(1, 0)$	$(2.5, 6)$

$x$ : Shift right 2  
 $y$ : v. Compress by  $\frac{1}{2}$   
 h. Compress by  $\frac{1}{2}$   
 Shift up 6

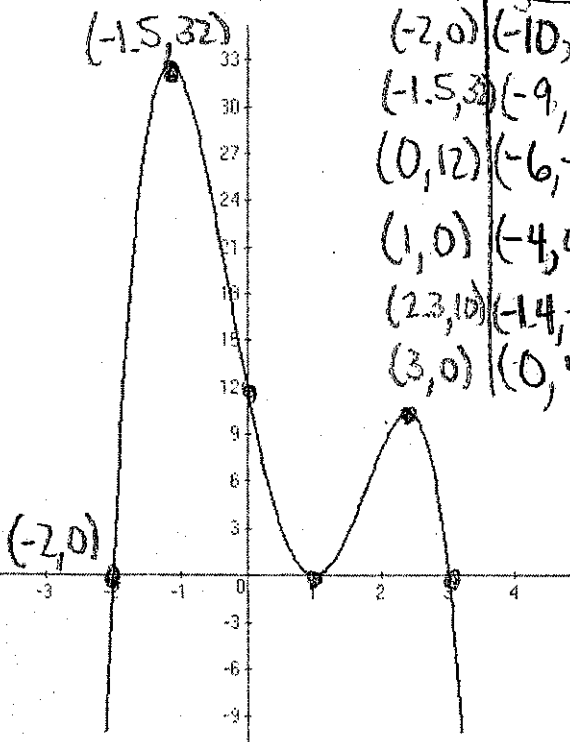
$\frac{1}{2}f(2(x-2)) + 6$

$g(x) = \frac{1}{2}f(2x-4) + 6$



4.

$y = f(x)$



$f(x)$	$g(x)$
$(-2, 0)$	$(-10, 4)$
$(-1.5, 32)$	$(-9, -28)$
$(0, 12)$	$(-6, -8)$
$(1, 0)$	$(-4, 4)$
$(2.3, 10)$	$(-14, -6)$
$(3, 0)$	$(0, 4)$

$g(x) = -f\left(\frac{1}{2}x + 3\right) + 4$   
 $2x - 6, -y + 4$   
 $= -f\left(\frac{1}{2}(x + 6)\right) + 4$

$x$ : Shift left 6  
 h. stretch by 2  
 $y$ : reflect over  $x$ -axis  
 Shift up 4

