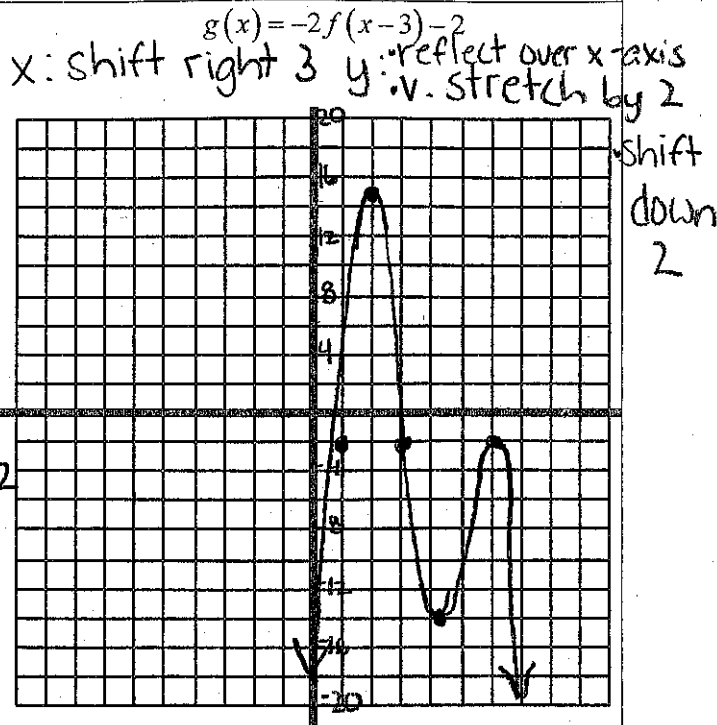
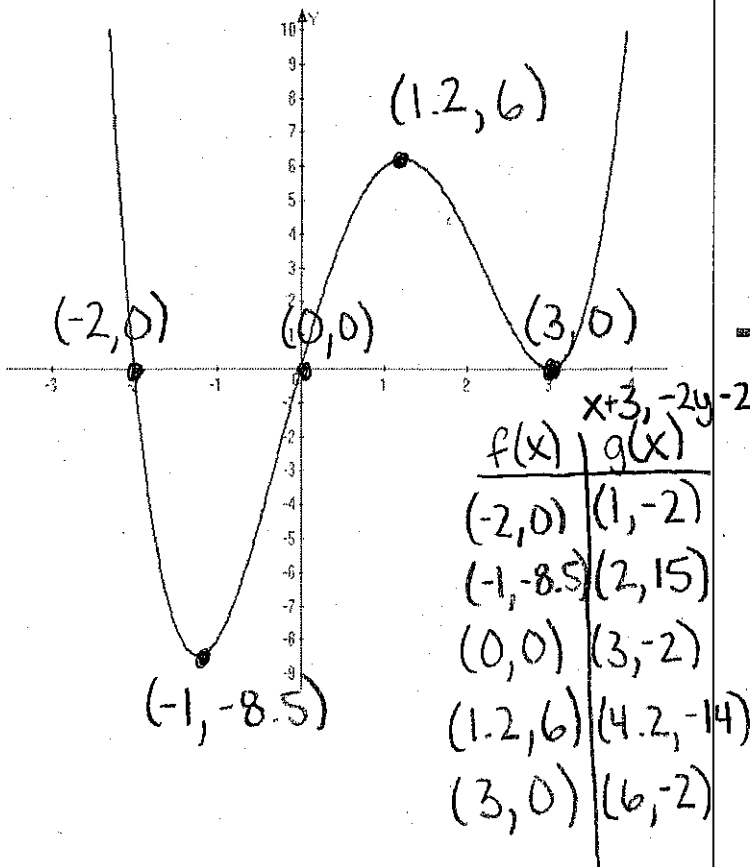
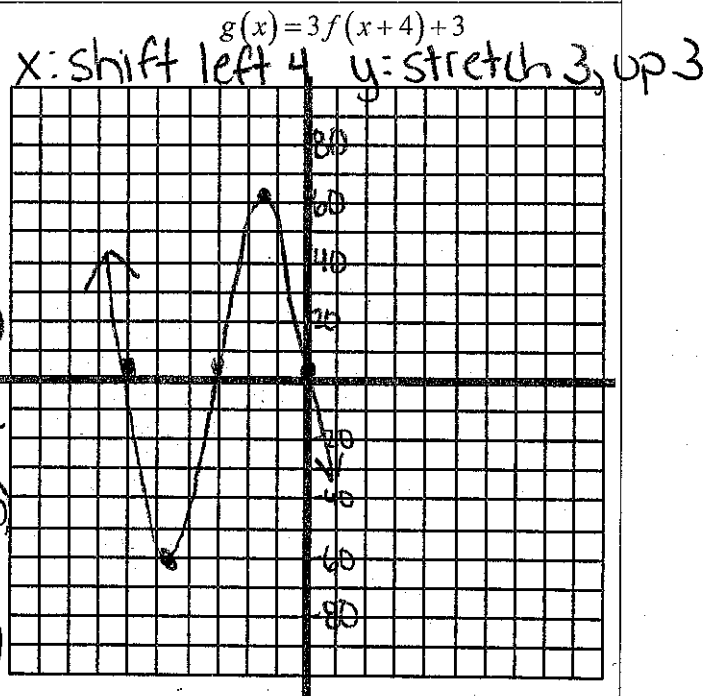
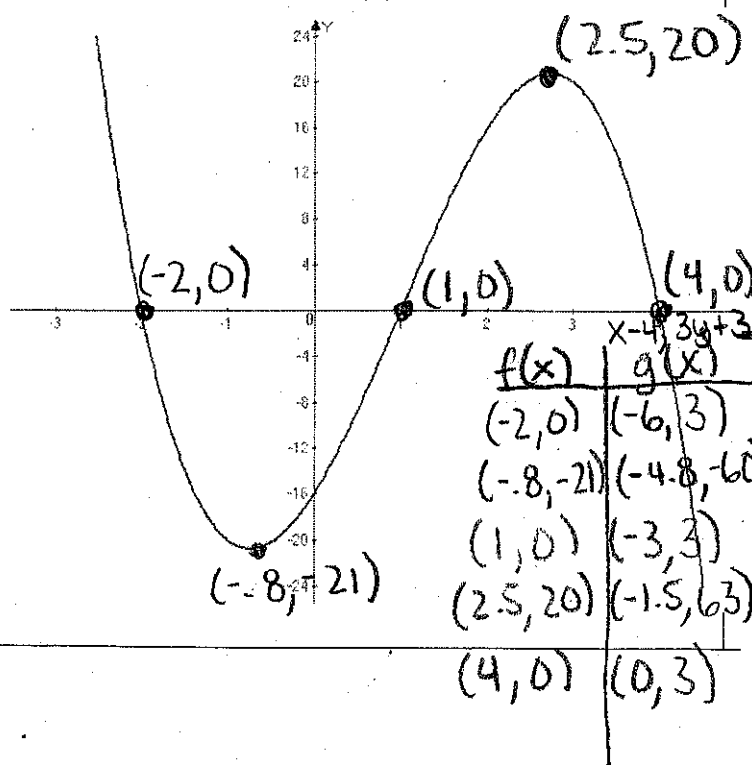


Use the graph of $f(x)$ to sketch the graph of $g(x)$.

1. $y = f(x)$

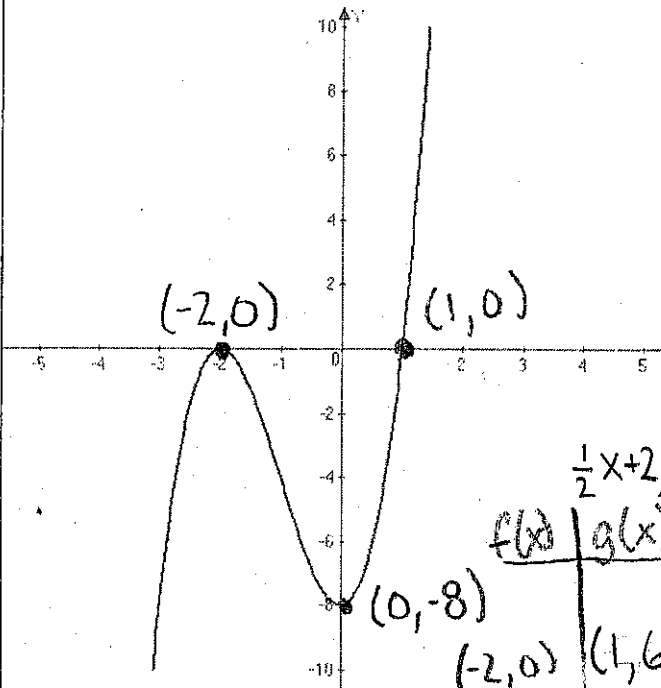


2. $y = f(x)$



3.

$y = f(x)$



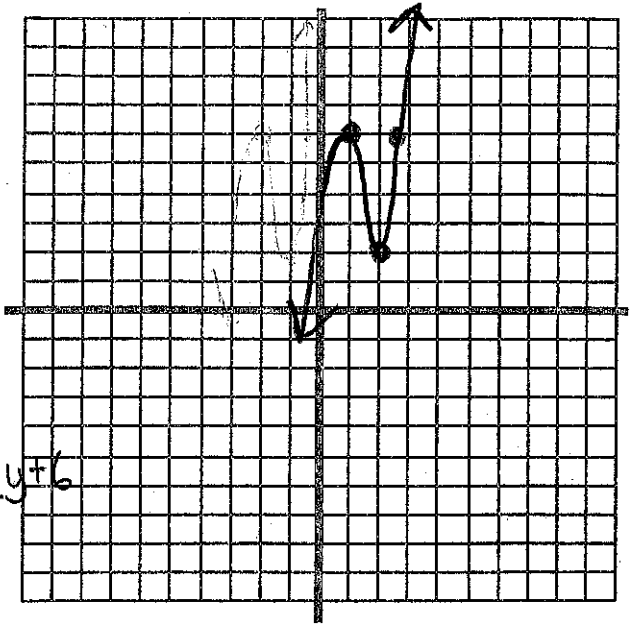
$\frac{1}{2}x + 2, \frac{1}{2}y + 6$

$f(x)$	$g(x)$
(-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

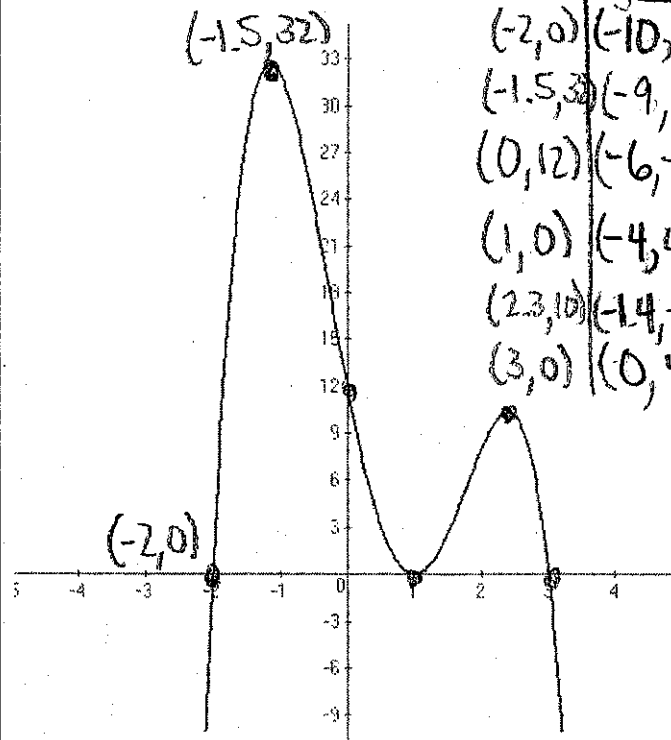
$\frac{1}{2}f(2(x-2)) + 6$

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



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

