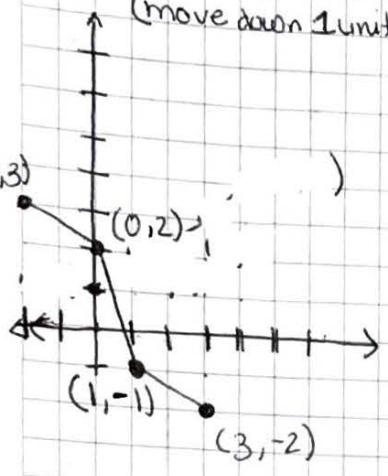


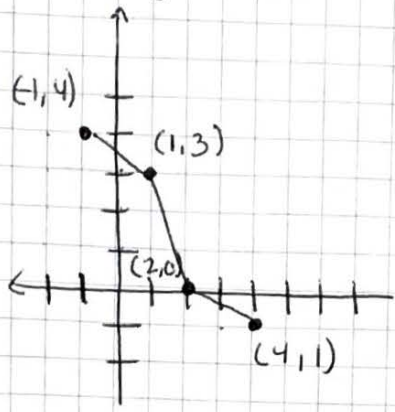
Sec 1.3
 Ch 1 pg 106 #14, 5-40(*5), 55, 59, 65, 71

#14) Use the graph of f to sketch each graph.

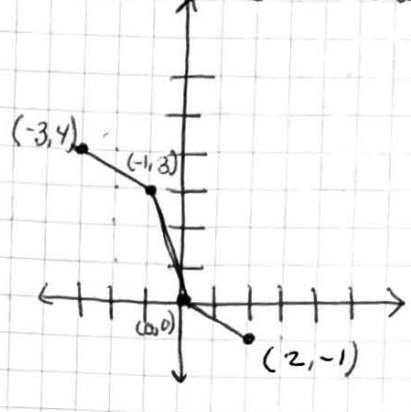
a) $y = f(x) - 1$
 (move down 1 unit)



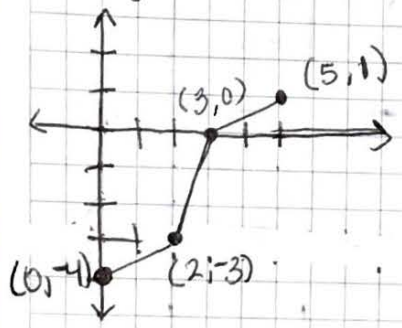
b) $y = f(x+1)$
 (right 1 unit)



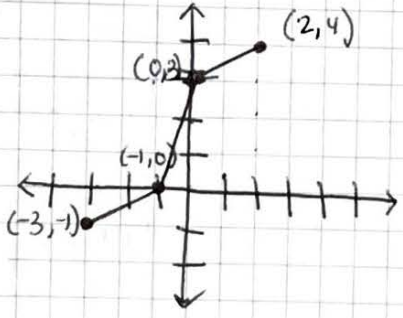
c) $y = f(x-1)$
 (left 1 unit)



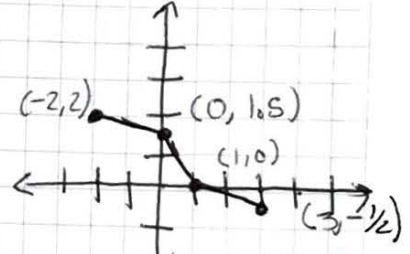
d) $y = -f(x-2)$
 (change y-coord to negative & right 2 units)



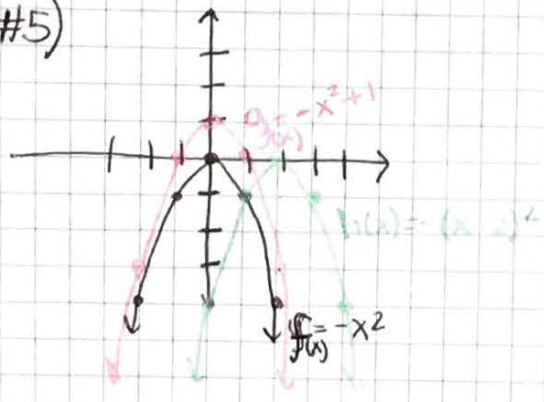
e) $y = f(-x)$
 (mult. x-coor. negative)



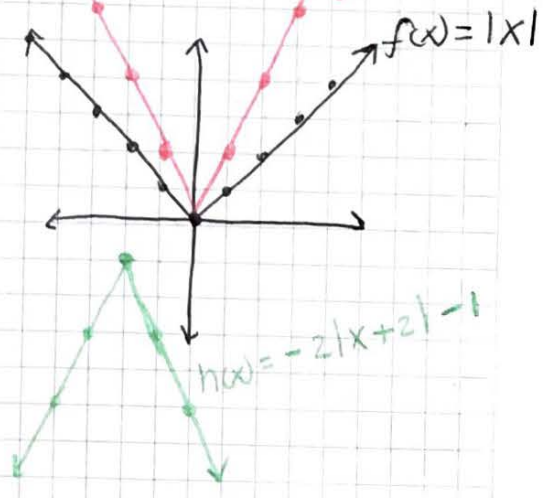
f) $y = \frac{1}{2}f(x)$
 (mult. y-coor. by 1/2)



#5)



#10)



Cont. sect 3 #

#15) Parent func
 $y = x$

func: $y = \frac{1}{2}x$
vertical shrink of $\frac{1}{2}$.

#20) Parent func $y = \sqrt{x}$ ↙

Function $y = \sqrt{-(x-3)}$

Reflected over the y-axis
and horizontal shift right
3 units

#25) Reflected over the x-axis
and a vertical shift 1 unit
upward

parent func: $y = x^3$

function $y = -x^3 + 1$

#30) $f(x) = \sqrt{x}$; $y = \sqrt{x+3}$

Shifted 3 units left

#35) $f(x) = |x|$; $y = -|x|$

is reflected over the
x-axis.

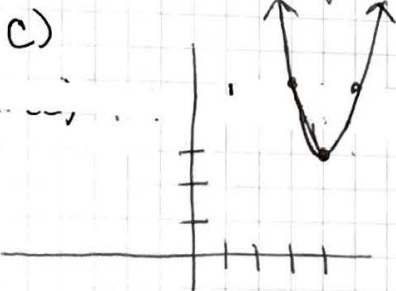
#40) $f(x) = x^3$; $y = -(x-4)^3$

Reflected over the
x-axis and moved
4 units to the right.

#55) $g(x) = 3 + 2(x-4)^2$

a) $f(x) = x^2$

b) shift 4 units right, a
vertical stretch of 2,
and shifted upward 3 units

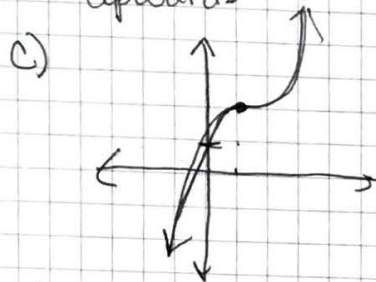


d) $g(x) = 3 + 2f(x-4)$

#59) $g(x) = (x-1)^3 + 2$

a) $f(x) = x^3$

b) shift 1 unit to the
right and 2 units shifted
upward.



d) $g(x) = f(x-1) + 2$

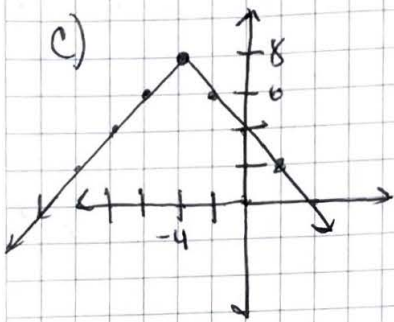
Cont.

Cont Sec 103

65) $g(x) = -|x+4| + 8$

b) shift 4 units left,
reflected over the
x-axis and shifted
8 units upward.

a) $f(x) = |x|$

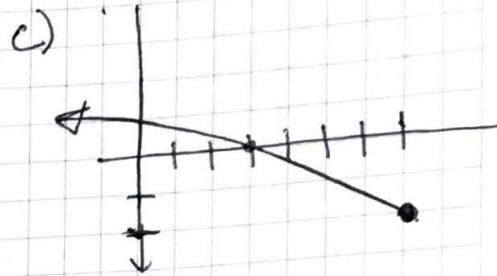


d) $g(x) = -f(x+4) + 8$

71) $g(x) = \sqrt{7-x} - 2$

a) $f(x) = \sqrt{x}$

b) reflected over the
y-axis, shifted 7
units right, then
shifted 2 units down



d) $g(x) = f(7-x) - 2$