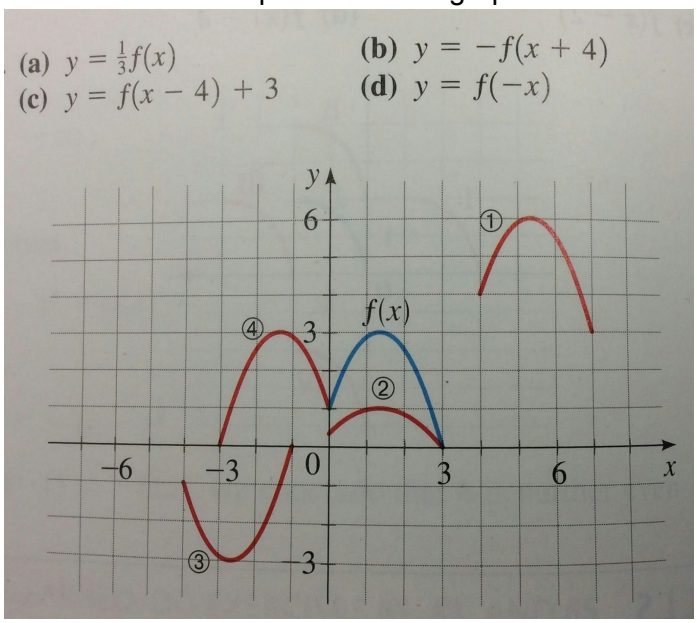
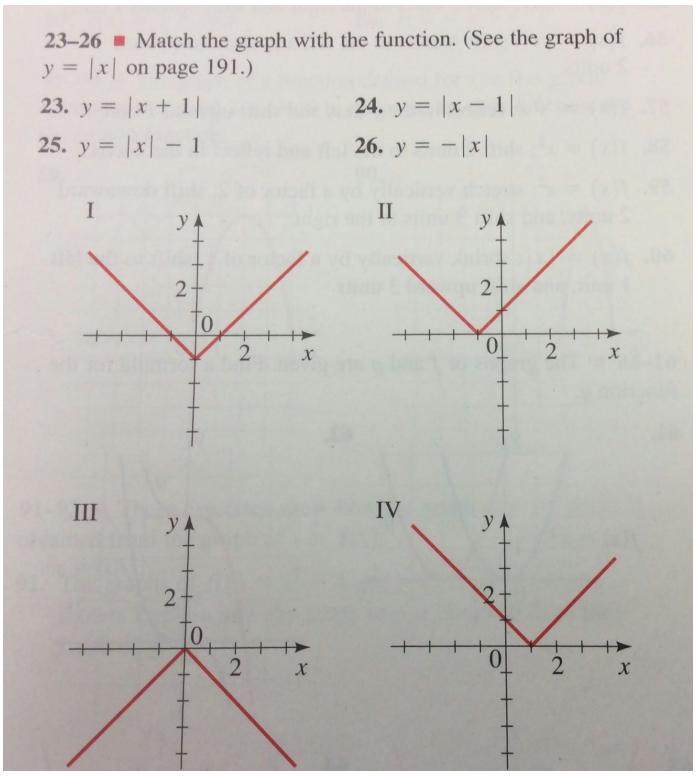
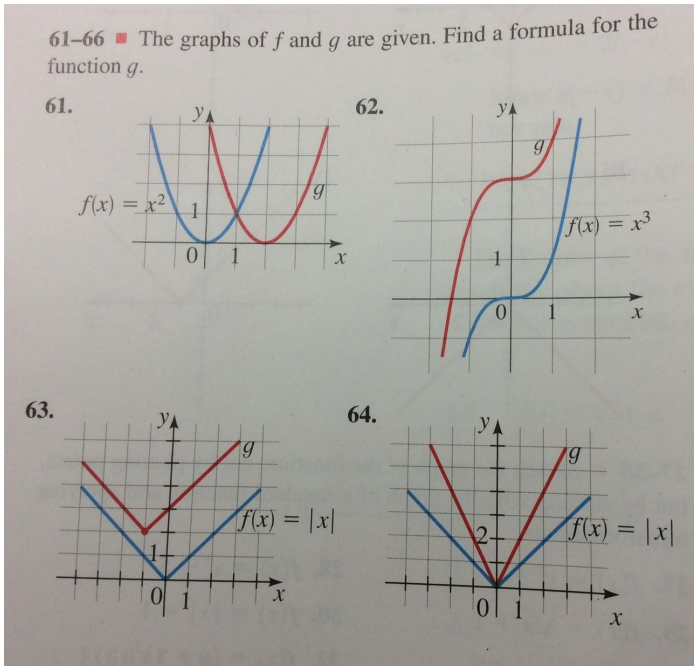
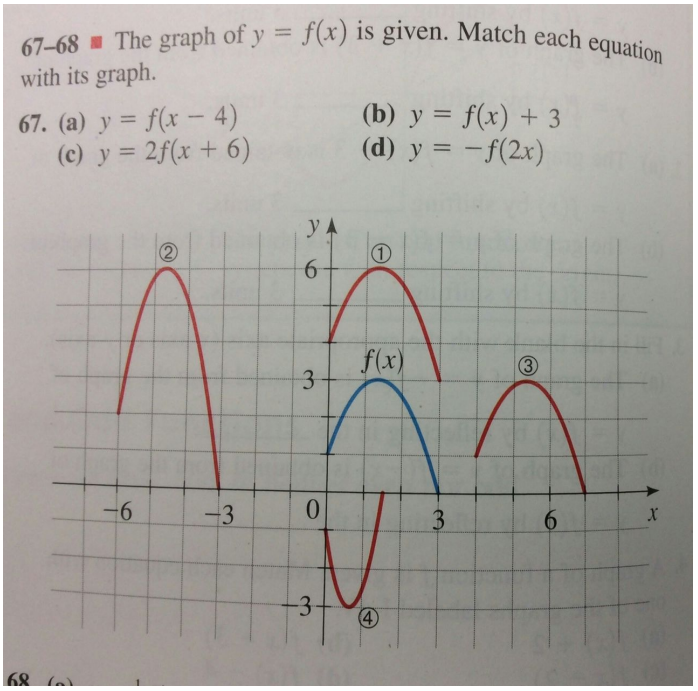
Math 1050 Transformations	Name
1. Match the equations to the graphs.  	2. 
3-6  61. 62. 63. 64.	7. 

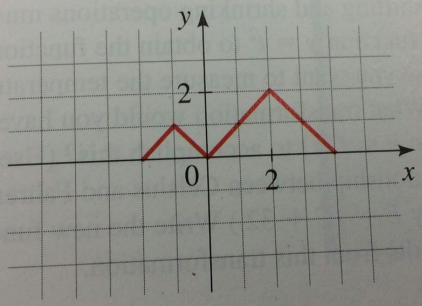
8.

The graph of g is given. Sketch the graphs of the following functions.

(a) $y = g(x + 1)$ **(b)** $y = g(-x)$

(c) $y = g(x - 2)$ **(d)** $y = g(x) - 2$

(e) $y = -g(x)$ **(f)** $y = 2g(x)$

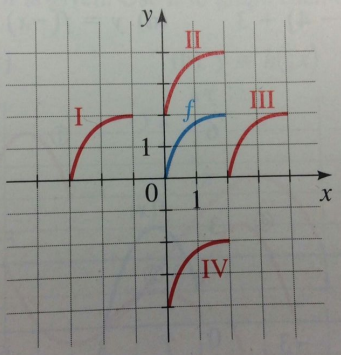


9.

A graph of a function f is given. Match each equation with one of the graphs labeled I–IV.

(a) $f(x) + 2$ **(b)** $f(x + 3)$

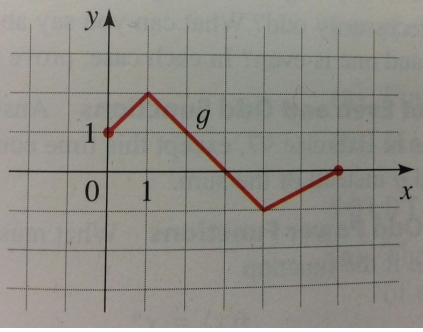
(c) $f(x - 2)$ **(d)** $f(x) - 4$



10.

The graph of g is given. Use it to graph each of the following functions.

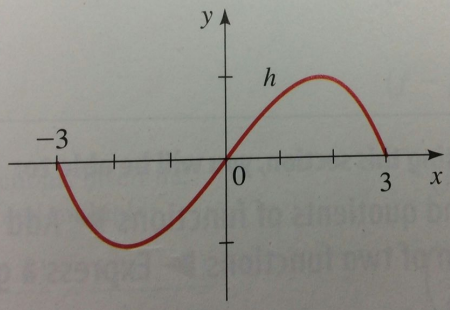
(a) $y = g(2x)$ **(b)** $y = g(\frac{1}{2}x)$



11.

The graph of h is given. Use it to graph each of the following functions.

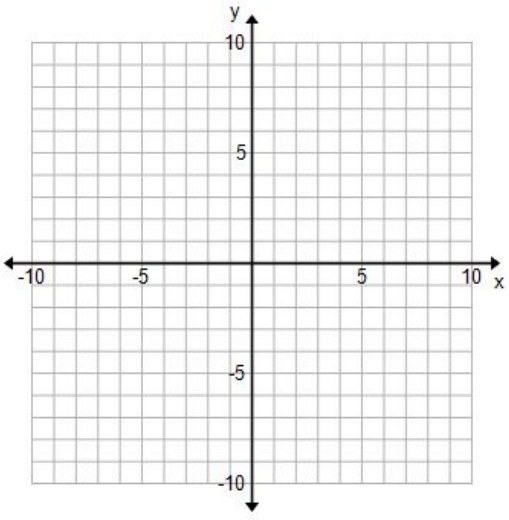
(a) $y = h(3x)$ **(b)** $y = h(\frac{1}{3}x)$



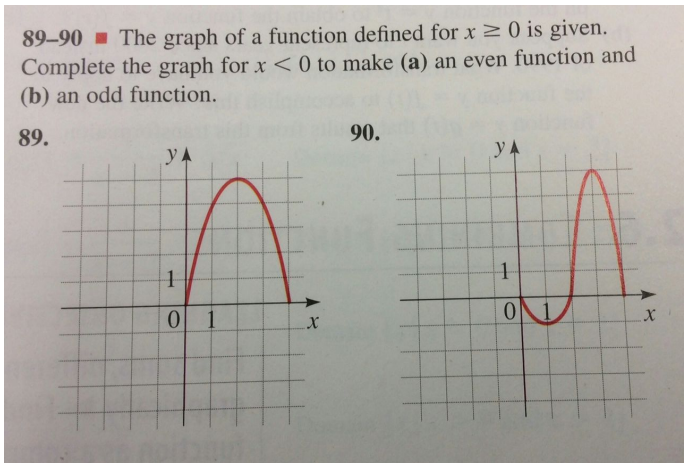
12. Find the Domain of $f(x) = \sqrt{5x^2 - 20x}$

Use a table to sketch the graph to verify your answer.

13.



14-15.



16. Label the following as an even, odd, or neither.

a. $f(x) = x^4 - 4x^2$

b. $f(x) = x^3 - x$

c. $f(x) = x + \frac{1}{x}$

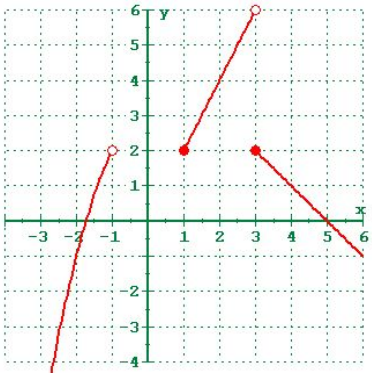
d. $f(x) = 3x^3 - 5x^2 + 1$

17. Find the average rate of change:
$f(x) = 5 - 2x^2$ between x = 1 and x = 1+h

18. Find the average rate of change:
$f(x) = \frac{4}{x}$ between x = 2 and x = a

19. Find the Domain:
$f(x) = \frac{3x}{4-x^2}$

20.



Is the above graph a function? Yes/No

Is the above graph one-to-one? Yes/No

What is f(-2)?

What is the Domain?

What is the Range?

Interval(s) of Increasing?

Interval(s) of Decreasing?

21. Evaluate for $g(a^2 - 1)$;
$g(t) = \frac{t+2}{t-2}$

22. Find the equation of the piecewise graph above.