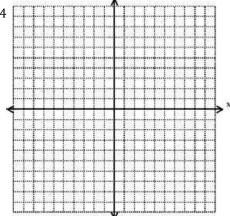
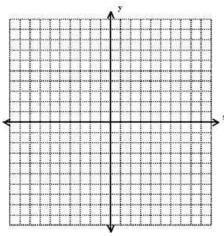
Graph the function and state the characteristics of each graph:

1.
$$f(x) = (x+3)^2 - 4$$



2.
$$f(x) = -\sqrt{x-5}$$

Name:



D:

R:

D:

R:

x-int:

y-int:

x-int:

y-int:

end behavior:

end behavior:

increasing:

decreasing:

increasing:

decreasing:

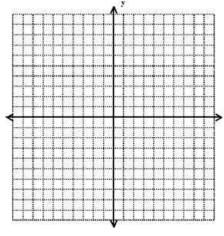
max:

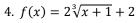
min:

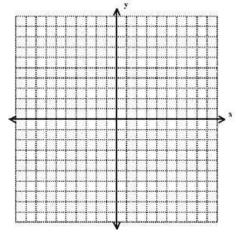
max:

min:

3.
$$f(x) = \frac{1}{2}|x| + 6$$







D:

R:

D:

R:

x-int:

y-int:

x-int:

y-int:

end behavior:

end behavior:

increasing:

decreasing:

increasing:

decreasing:

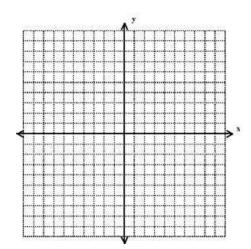
max:

min:

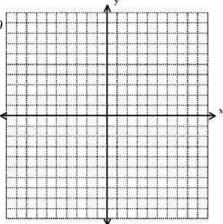
max:

min:

5.
$$f(x) = -x^3 - 3$$



$$6. f(x) = -3(x+5)^2 + 9$$



D:

R:

D:

R:

x-int:

y-int:

x-int:

y-int:

end behavior:

end behavior:

increasing:

decreasing:

increasing:

decreasing:

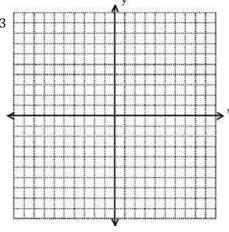
max:

min:

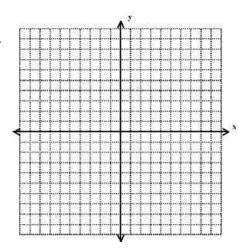
max:

min:

7.
$$y = \frac{1}{2}f(x+3) - 3$$



$$8. y = -f(x - 5) + 4$$



D:

R:

D:

R:

x-int:

y-int:

x-int:

y-int:

end behavior:

end behavior:

increasing:

decreasing:

increasing:

decreasing:

max:

min:

max:

min: