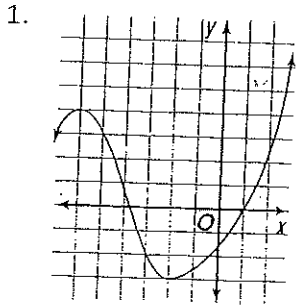


Name: key
 Date: _____

Miss Powell
 Block: _____

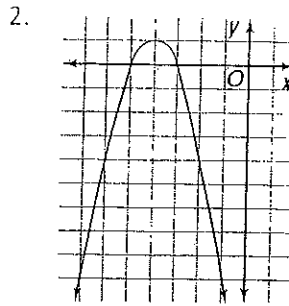
1.5 Graphing Equations

Determine the maximum(s) and minimum(s) of each function. Determine on what intervals the graphs are increasing, decreasing, and/or remaining constant.



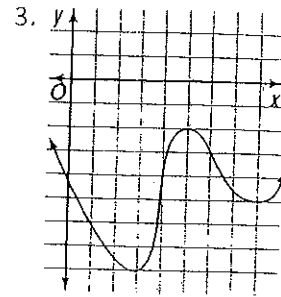
Max/min $(-6, 4)$ / $(-2, -3)$
 Increasing $(-\infty, -6)$ $(-2, \infty)$
 Decreasing $(-6, -2)$
 Constant _____

D: $(-\infty, \infty)$
 R: $(-\infty, \infty)$



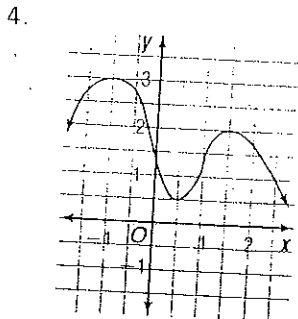
Max(s)/min(s) $(-4, 1)$
 Increasing $(-\infty, -4)$
 Decreasing $(-4, \infty)$
 Constant _____

D: $(-\infty, \infty)$
 R: $(-\infty, \infty)$



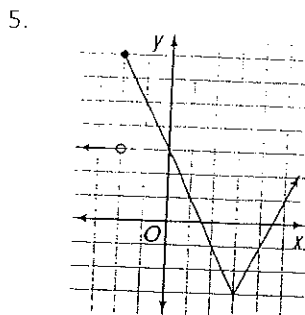
Max/Min(s) $(5, -2)$ / $(3, 8)$ $(8, 5)$
 Increasing $(3, 5)$ $(8, \infty)$
 Decreasing $(-\infty, 3)$ $(5, 8)$
 Constant _____

D: $(-\infty, \infty)$
 R: $(-\infty, \infty)$



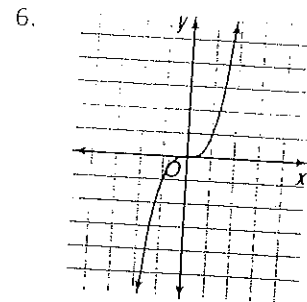
Max/min $(-1, 3)$ $(1.5, 2)$ / $(1.5, 2)$ $(1.5, 2)$
 Increasing $(-\infty, -1)$ $(1, 1.5)$ $(1.5, 2)$
 Decreasing $(-1, 1)$ $(2, \infty)$
 Constant _____

D: $(-\infty, \infty)$
 R: $(-\infty, \infty)$



Max(s)/min(s) $(3, -3)$
 Increasing $(3, \infty)$
 Decreasing $(-\infty, 3)$
 Constant _____

D: $(-\infty, \infty)$
 R: $(-\infty, \infty)$

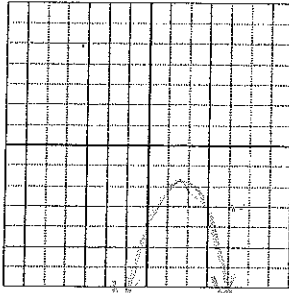


Max/Min(s) _____
 Increasing $(-\infty, \infty)$
 Decreasing _____
 Constant _____

D: $(-\infty, \infty)$
 R: $(-\infty, \infty)$

Use a graphing calculator to graph each function, copy the graph, determine where the max and mins are, as well as where the graph is increasing, decreasing, or remaining constant.

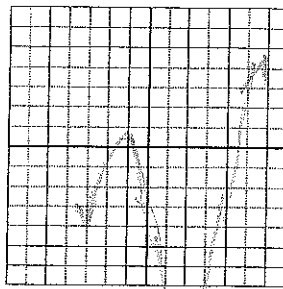
7. $f(x) = -4 + 3x - x^2$



D: $(-\infty, \infty)$
R: $(-\infty, 1.5)$

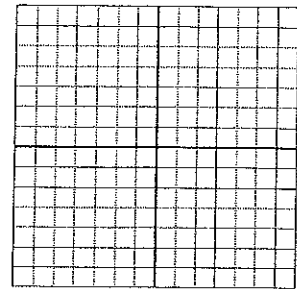
Max/min $(1.5, 1.75)$
Increasing $(-\infty, 1.5)$
Decreasing $(1.5, \infty)$
Constant $-$

8. $V(w) = w^3 - 7w - 6$



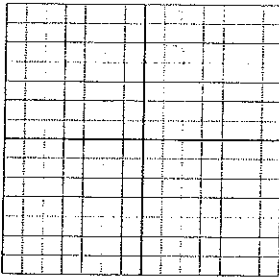
Max(s)/min(s) $(-1.53, 1.13)$
 $(1.53, -13.13)$
Increasing $(-\infty, -1.53)$
 $(1.53, \infty)$
Decreasing $(-1.53, 1.53)$
Constant $-$
D: \mathbb{R} $(-\infty, \infty)$

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



Max/Min(s) $(-0.59, 0.07)$
 $(0.47, -3.51)$
Increasing $(-\infty, -0.59)$
 $(0.47, \infty)$
Decreasing $(-0.59, 0.47)$
Constant $-$
D: \mathbb{R} $(-\infty, \infty)$

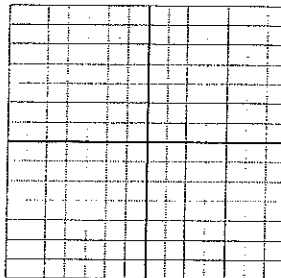
10. $R(x) = x^3 - 4x^2 - 2$



Max/min $(0, -2)$
 $(-1.41, -6)$ $(1.41, -6)$
Increasing $(-1.41, 0)$ $(1.41, \infty)$
Decreasing $(-\infty, -1.41)$ $(0, 1.41)$
Constant $-$

D: $(-\infty, \infty)$
R: $(-\infty, \infty)$

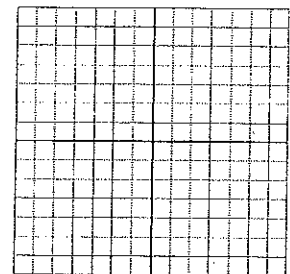
11. $f(x) = 2x^3 + 4x^2 - 2x - 3$



Max(s)/min(s) $(-1.55, 2.26)$
 $(0.22, -3.23)$
Increasing $(-\infty, -1.55)$
 $(0.22, \infty)$
Decreasing $(-1.55, 0.22)$
Constant $-$

D: $(-\infty, \infty)$
R: $(-\infty, \infty)$

12. $D(t) = t^3 + t$



Max/Min(s) $-$
Increasing $(-\infty, \infty)$
Decreasing $-$
Constant $-$

D: \mathbb{R} $(-\infty, \infty)$