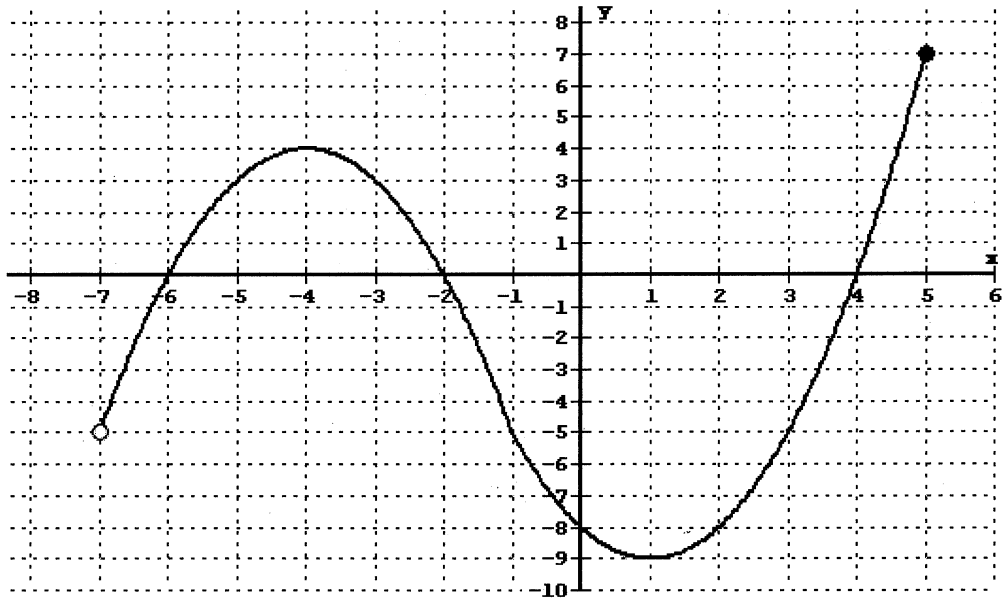
Analyze the Graph



1) Viewing Rectangle
Xmin: -8 Ymin: -10
Xmax: 6 Ymax: 8
Xscl: 1 Yscl: 1

2) x-intercept(s): $(-6,0)$ $(-2,0)(4,0)$

3) y-intercept: $(0,-8)$

4) Function? Yes

5) Domain: $(-7,5]$

6) Range: $[-9,7]$

7) Where does $f(x) = 0$? $-6,-2,4$
List the x-values.

8) Where is $f(x) < 0$? $(-7,-6)\cup(-2,4)$
State the x-values, interval notation.

9) Where is $f(x) \geq 0$? $[-6,-2]\cup[4,5)$
State the x-values, interval notation.

10) Find $f(2)$. $= -8$

11) Find $f(-5)$. $= 3$

12) How many times does the line $y = 2$ intersect the graph? 3

13) Where does $f(x) = 4$? -4 and 4.5
List the x-values

14) Where does $f(x) = -5$? -1 and 3
List the x-values

15) Find $f(-1) - f(2)$. $-5-(-8) = 3$

16) Find $3f(1)$. $3(-9) = -27$

17) Absolute Maximum value: 7

18) Absolute Minimum value: -9

19) Relative Maximum value: 4

20) Relative Minimum value:

21) Where is the graph increasing? $(-7,-4)\cup(1,5)$
State the x-values, interval notation.

22) Where is the graph decreasing? $(-4,1)$
State the x-values, interval notation.

23) Is the Graph a One-to-One Function? Yes