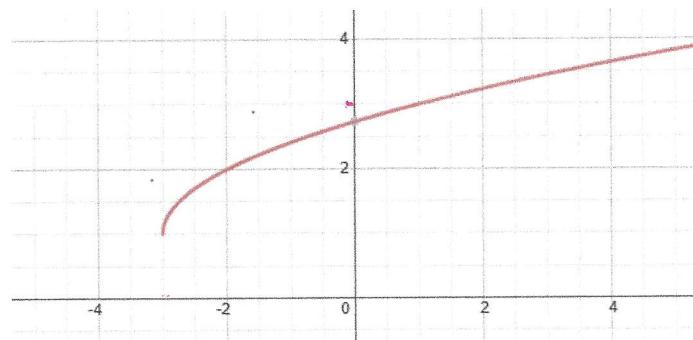
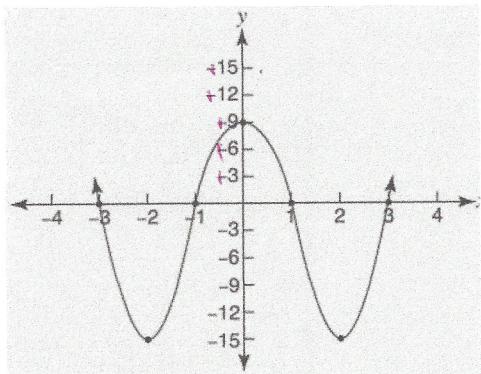


Function Characteristics

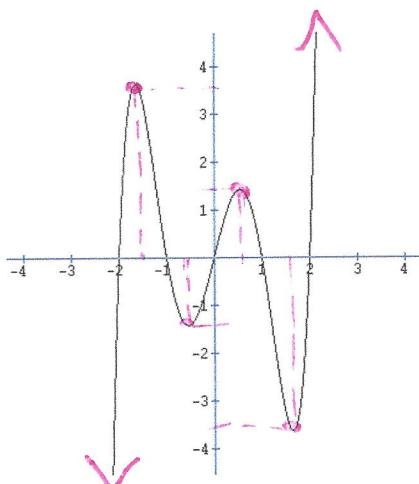


Domain	$[-3, \infty)$
Range	$[1, \infty)$
Relative Maximums	none
Relative Minimums	$(-3, 1)$
Increasing Intervals	$(-3, \infty)$

X Intercepts	none
Y Intercepts	$(0, 1.25)$
End Behavior	as $x \rightarrow \infty, y \rightarrow \infty$
	as $x \rightarrow -\infty, y \rightarrow 1$
Decreasing Intervals	none



Domain	$(-\infty, \infty)$	X Intercepts	$(-3, 0), (-1, 0)$
Range	$[-15, \infty)$	Y Intercepts	$(1, 0), (3, 0)$
Relative Maximums	$(0, 9)$	End Behavior	as $x \rightarrow \infty, y \rightarrow \infty$
Relative Minimums	$(-2, -15) \text{ and } (2, -15)$		as $x \rightarrow -\infty, y \rightarrow -\infty$
Increasing Intervals	$(-2, 0) \cup (2, \infty)$	Decreasing Intervals	$(-\infty, -2), (0, 2)$



Domain	$(-\infty, \infty)$	X Intercepts	$(-2, 0), (-1, 0)$
Range	$(-\infty, \infty)$	Y Intercepts	$(0, 0)$
Relative Maximums	$(-1.5, 3.5)$	End Behavior	as $x \rightarrow \infty, y \rightarrow \infty$
Relative Minimums	$(-0.5, -3.5)$		as $x \rightarrow -\infty, y \rightarrow -\infty$
Increasing Intervals	$(-\infty, -1.5) \cup (-0.5, \infty)$	Decreasing Intervals	$(-1.5, -0.5) \cup (0.5, 1.5)$

Vocabulary

DECREASING INTERVAL in terms of x	trace the graph from left to right with your finger. The sections where your finger is moving down are decreasing.
DEPENDANT VARIABLE	y , remember y values are dependent on the x value you put in the function
DOMAIN in terms of x	all the x values for a function
END BEHAVIOR	what happens at the far ends of the graph. if it points up, y is heading to $+\infty$, down means $-\infty$
INCREASING INTERVAL in terms of x	from left to right on the graph, when you trace with your finger, the sections when you are traveling up.
INDEPENDENT VARIABLE	x
INTERCEPTS (X and Y) points (x, y)	where the function graph crosses the x and y axis
RANGE in terms of y	all the y values for a function
RELATIVE MAXIMUM points (x, y)	peaks
RELATIVE MINIMUM points (x, y)	valley