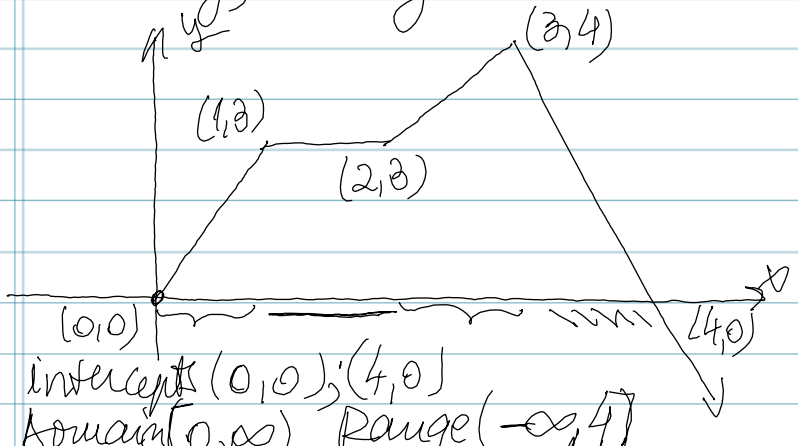
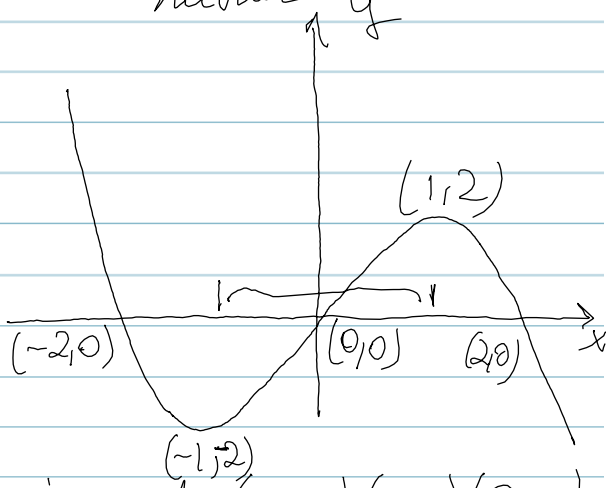
USE THE GRAPH TO FIND:
a) The intercepts if any
b) Domain and Range
c) The intervals on which is increasing, decreasing and constant



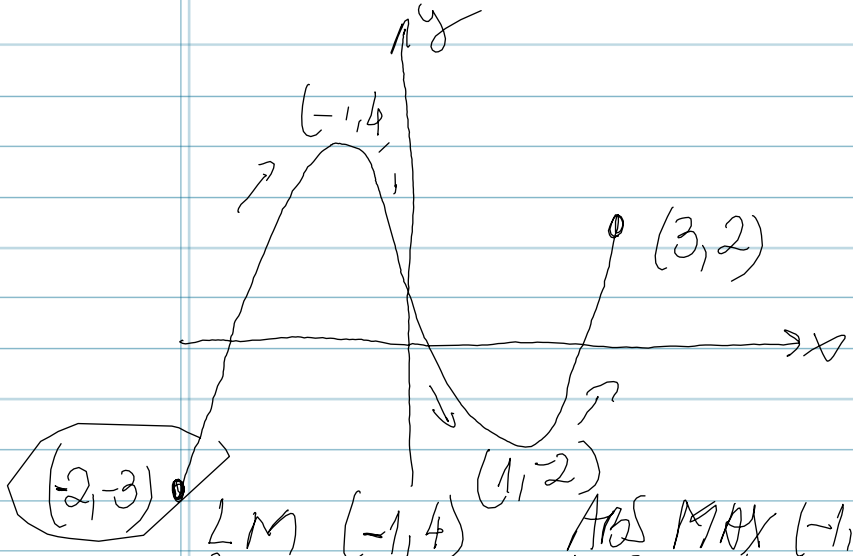
intercepts (0,0); (4,0)
Domain $(0,\infty)$ Range $(-\infty,4]$
increasing $(0,1) \cup (2,3)$
Constant (1,2)
decreasing $(3,\infty)$
neither

c) whether is even, odd or neither

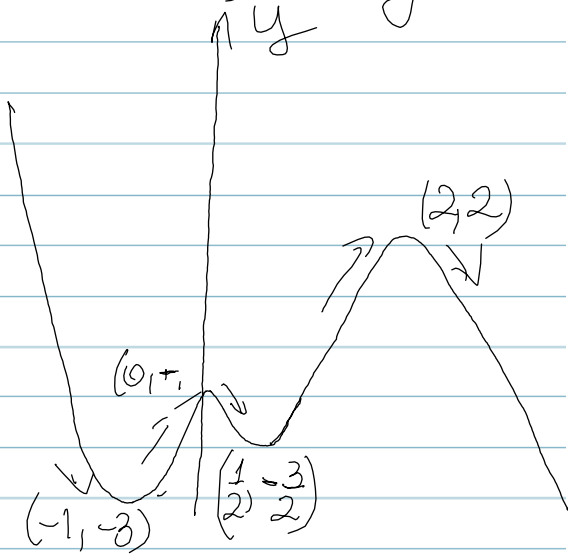


intercepts $(-2,0)$ $(0,0)$ $(2,0)$
Domain $(-\infty,\infty)$ Range $(-\infty,$
increasing $(-1,1)$
decreasing $(-\infty,-1) \cup (1,\infty)$
ODD

USE THE GRAPH TO FIND:
a) The local maximum and local minimum, if any.
b) Absolute maximum and absolute minimum, if any.



LM (-1,4)
L min (1,-2)
ABS MAX (-1,4)
ABS MIN (-2,-3)



LM $(0,-1)$, $(2,2)$
L m $(-1,-3)$, $(\frac{1}{2},-\frac{3}{2})$
NO ABS. EXTREMA

FIND ALGEBRAICALLY WHETHER EACH FUNCTION IS EVEN, ODD OR NEITHER

$f(x) = x\sqrt{1-x^2}$

$f(-x) = (-x)\sqrt{1-(-x)^2}$
$= -x\sqrt{1-x^2}$
$= -(x\sqrt{1-x^2})$
$= -f(x) \Rightarrow$ ODD

$g(s) = 4s^{2/3}$
$= 4\sqrt[3]{s^2}$

$g(-s) = 4\sqrt[3]{(-s)^2}$
$= 4\sqrt[3]{s^2}$
$= g(s) \Rightarrow$ EVEN

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

$f(-x) = (-x)^2 - 4(-x)$
$= x^2 + 4x \neq f(x)$
$= -(-x^2 - 4x) \neq -f(x)$
$\Rightarrow$ NEITHER

$g(x) = x(x-2)(x+3)$

$g(-x) = (-x)[(-x)-2][(-x)+3]$
$= -x(-x-2)(-x+3)$
$= -x(-1)(x+2)(-1)(x-3)$
$= -x(x+2)(x-3) \neq g(x)$
$\neq -g(x)$
$=$ NEITHER

$h(t) = t^3 - 5t$

$h(-t) = (-t)^3 - 5(-t)$
$= -t^3 + 5t \neq h(t)$
$= -(t^3 - 5t)$
$= -h(t) \Rightarrow$ ODD