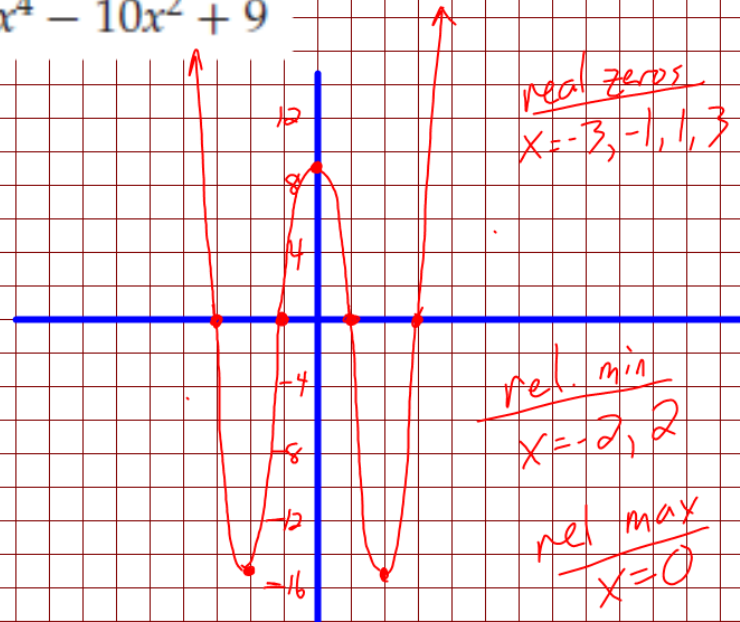
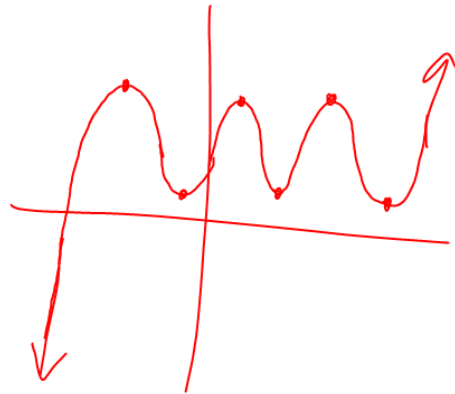


18.  $f(x) = x^4 - 10x^2 + 9$

$x$	$f(x)$
-4	105
-3	0
-2	-15
-1	0
0	9
1	0
2	-15
3	0
4	105

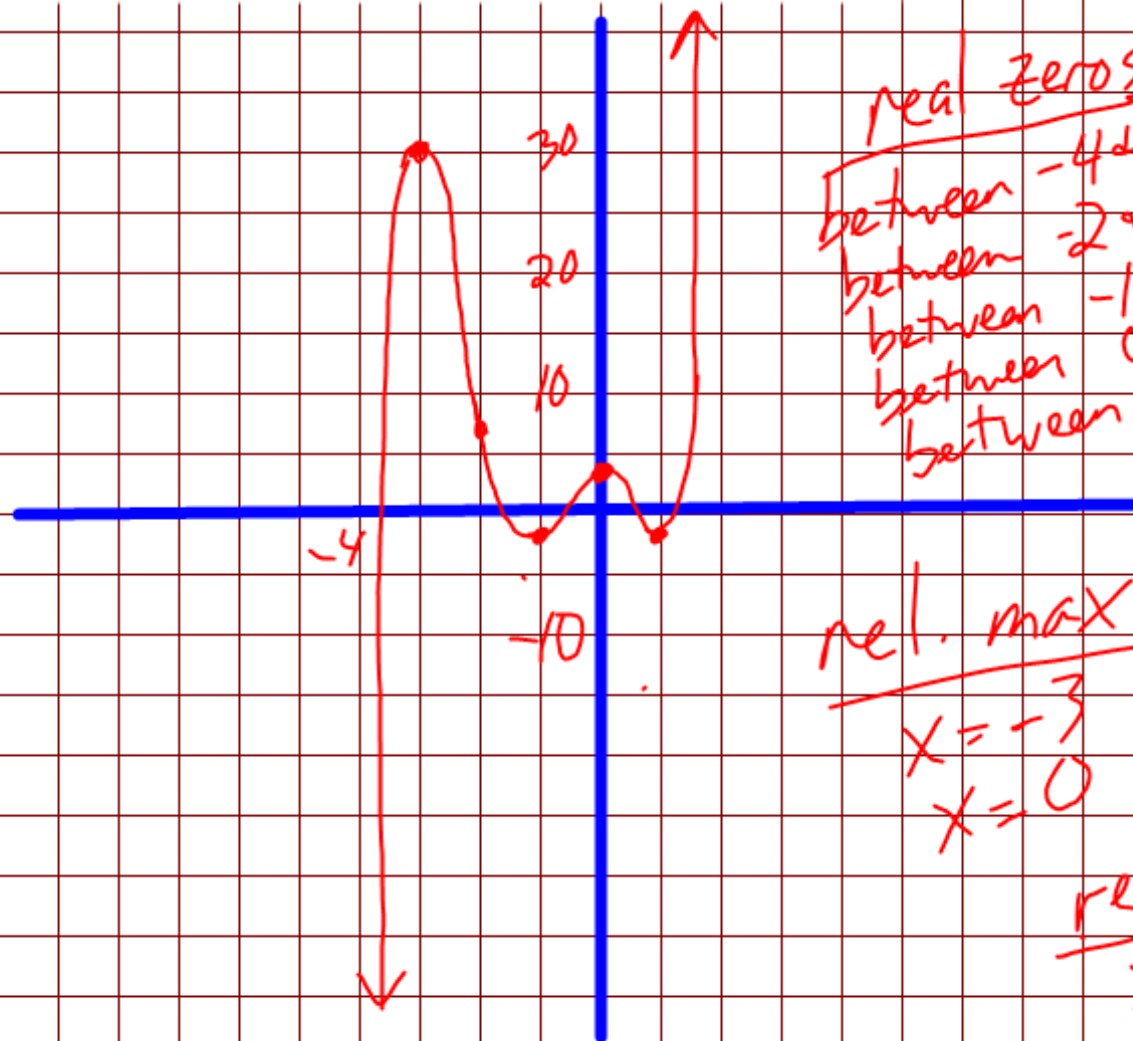


④ odd  
3 max  
3 min  
left neg.



30.  $f(x) = x^5 + 4x^4 - x^3 - 9x^2 + 3$

$x$	$f(x)$
-4	-77
-3	30
-2	7
-1	-2
0	3
1	-2
2	53
3	462
4	



real zeros  
 between -4 & -3  
 between -2 & -1  
 between -1 & 0  
 between 0 & 1  
 between 1 & 2

rel. max  
 $x = -3$   
 $x = 0$

rel min  
 $x = 1$   
 $x = -1$