Lesson Title 4.8 Analyzing Polynomial Graphs DAY ONE Notes ALG 2 Date _____

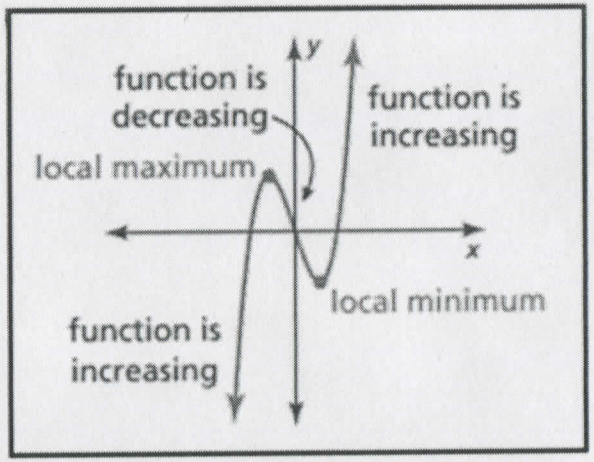
Zero:	k is a zero of the polynomial function f. X =
Factor:	$(x - k)$ is a factor of the polynomial $f(x)$. (x)
Solution:	k is a solution (or root) of the polynomial equation $f(x) = 0$. X=
x-Intercept:	If k is a real number, then k is an x-intercept of the graph of the polynomial function f. The graph of f passes through $(k, 0)$.

TURNING POINTS

1. zeros
2. y-int
3. Degree
4. ODD/EVEN
5. LC
6. max/min

READING

Local maximum and local minimum are sometimes referred to as *relative maximum* and *relative minimum*.



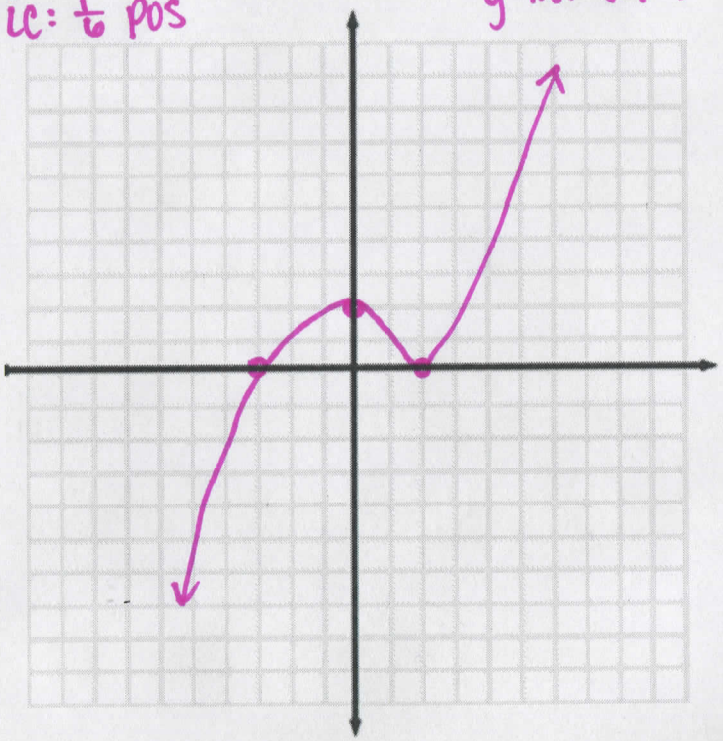
Local/Relative VS ABSOLUTE

- Even functions have either an absolute max or min, not both
- Odd functions can have an absolute max and an absolute min
- There can be multiple local/relative max and min coordinates for both odd and even functions

TASK 1: Using x-intercepts to graph a polynomial function.

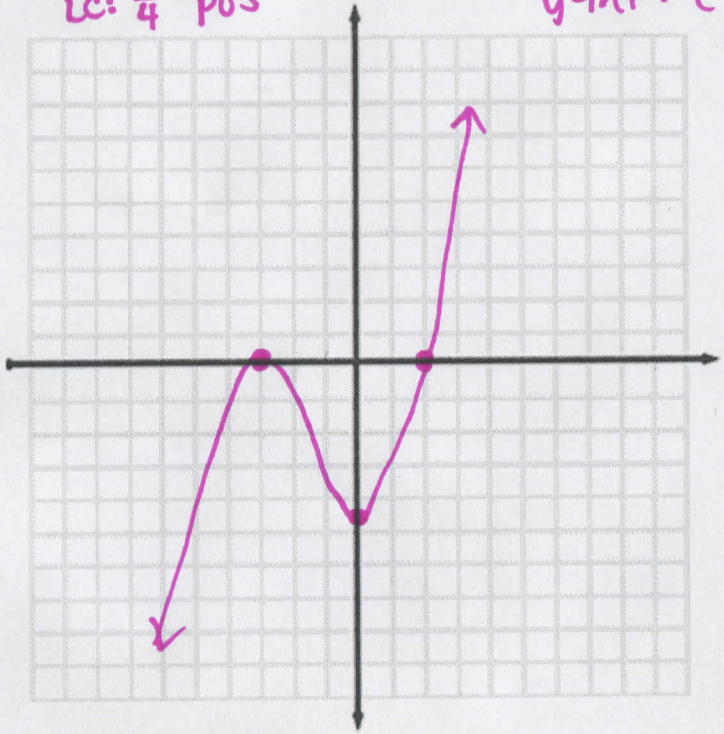
$f(x) = \frac{1}{6}(x+3)(x-2)^2$

D: 3 odd
LC: $\frac{1}{6}$ pos
X = -3, 2, 2
y-int: (0, 2)



$f(x) = \frac{1}{4}(x-2)(x+3)^2$

D: 3 odd
LC: $\frac{1}{4}$ pos
X = 2, -3, -3
y-int: $(-\frac{18}{4}, 0)$



Reminders to myself about what I struggled with during note tasks:

Still need help with: