Today's Plan:

Learning Target (standard): I will graph polynomial functions using transformations and the 5-step process.

Students will: Complete practice problems over previous concepts at the boards, put up homework problems on the board and make necessary corrections to their own work, and take a quiz on polynomial graphs.

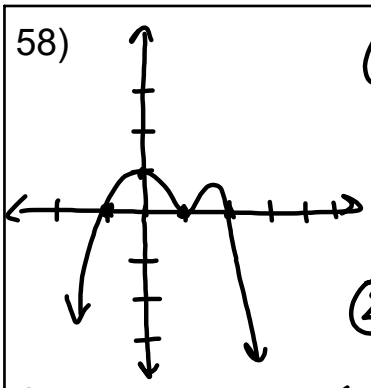
Teacher will: Provide practice problems over previous concepts, check homework problems for accuracy and provide students feedback, describe and provide quiz problems.

Assessment: Board work, homework check and quiz

Differentiation: Students will work at the board, go over and correct homework at their seats, actively engage in quiz problems.

Go over your homework with someone around you. If there are any questions, please let me know. When you are finished, leave your homework on your desk and please go to the board for practice problems.

58)



① degree: @ least 4 and even
MTP: @ least 3 and odd
I_x: (-1,0), (1,0), (2,0)
I_y: (0,1)

② zeros: $x=-1$ mult. odd → crosses x-axis
$x=1$ mult. even → touches
$x=2$ mult. odd. x-axis → crosses x-axis

③ EB:
$f(x)=ax^n$
n is even
a(-)
down on left
down on right

④

	test -2	-1	0	$\frac{3}{2}$	2	3
$x+1$	−	0	+	+	+	+
$(x-1)^2$	+	+	+	0	+	+
$x-2$	−	−	−	−	0	+
$f(x)$	below	above	above	below		

d, f

Graph using the 5-step process:

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

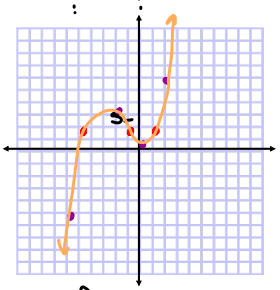
1) degree: 3
MTP: 2
I_x: (0,0), (2,0), (-4,0)
I_y: (0,0)

2) zeros:
x=0 mult. 1 → crosses x-axis
x=2 mult. 1 → crosses x-axis
x=-4 mult. 1 → crosses x-axis

3) EB: $f(x)=x^3$
down on left
up on right

4)

	test -5	-4	-1	0	1	2	3
x	−		−	0	+		+
x-2	−		−		−	0	+
x+4	−	0	+		+		+
point	(-5,-35)		(-1,9)		(1,-5)		(3,21)
f(x)	below		above		below		above



56) c, e, f
58) d, f