ntegrated Math 3: ASSIGNMENT 2018 Kuta Software LLC. All rights reser	Name		
redicting the Graph of a Polynomial Pract		Date	Period_
Let's predict the graph of $f(x) = (x+2)^2(x-2)$ (2)	1	et the graph of $f(x)$	``
What is its degree?	What is its	degree?	
What are the x-intercepts? Mark them on graph.	graph.	e x-intercepts? Ma	rk them on
Put a dot on the y-intercept.	Put a dot on the y-intercept.		
	Are there a	ny x-intercepts wit	ha
Are there any x-intercepts with a multiplicity of 2 or more?		y of 2 or more?	
	Is this an ev	ven or odd multipli	city?
Is this an even or odd multiplicity?	D	. (/	1 1
Because it's (even/odd), it will have a (bounce/bend) at that intercept.		s (even/odd), it will nd) at that intercep	
(bounce/bend) at that intercept.	Draw a dar	k dot on the x-inter	reent with a
Draw a dark dot on the x-intercept with a		of 2 or more and y	
multiplicity of 2 or more and write		nd) next to it.	WIIIC
(bounce/bend) next to it.	(bounde, bo		
	How should	d the left and right	sides of this
How should the left and right sides of this		ve? (up? down?)	
graph behave? (up? down?)		R: Even degree fu	nctions have
REMINDER: Even degree functions have	the same end behaviors. Odd degree		
the same end behaviors. Odd degree	functions have	ave opposite end b	ehaviors.
functions have opposite end behaviors.			
	Now, let's t	ry to draw this!	
Now, let's try to draw this!		▲ 1/	
▲ <i>Y</i>		4	
		3	
		2	
	◄ <u>-4</u> -3 -2	-1 1 2 3	4x
-10 - 8 - 6 - 4 - 2 2 4 6 8 10 x		-1	
		-2	
		-4	
-10			

3) Let's predict the graph of $f(x) = (x - 1)(x + 2)^3$

What is its degree?

What are the x-intercepts? Mark them on graph.

Put a dot on the y-intercept.

Are there any x-intercepts with a multiplicity of 2 or more?

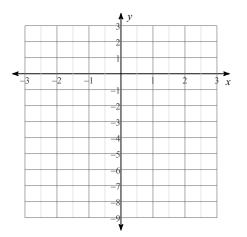
Is this an even or odd multiplicity?

Because it's (even/odd), it will have a (bounce/bend) at that intercept.

Draw a dark dot on the x-intercept with a multiplicity of 2 or more and write (bounce/bend) next to it.

How should the left and right sides of this graph behave? (up? down?) REMINDER: Even degree functions have the same end behaviors. Odd degree functions have opposite end behaviors.

Now, let's try to draw this!



4) Let's predict the graph of $f(x) = (x - 2)(x + 1)^2$

What is its degree?

What are the x-intercepts? Mark them on graph.

Put a dot on the y-intercept.

Are there any x-intercepts with a multiplicity of 2 or more?

Is this an even or odd multiplicity?

Because it's (even/odd), it will have a (bounce/bend) at that intercept.

Draw a dark dot on the x-intercept with a multiplicity of 2 or more and write (bounce/bend) next to it.

How should the left and right sides of this graph behave? (up? down?) REMINDER: Even degree functions have the same end behaviors. Odd degree functions have opposite end behaviors.

Now, let's try to draw this!

