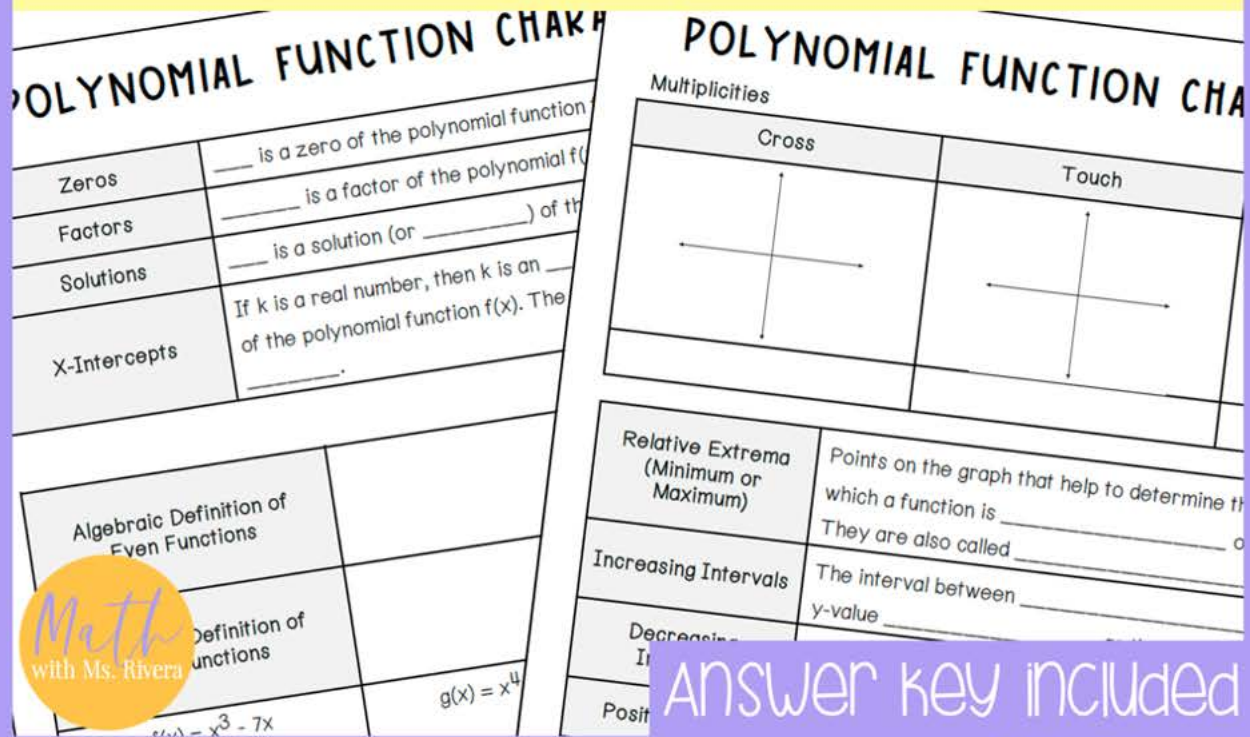
keep scrolling to get a sneak peak!

This set of guided notes will walk Algebra 2 students through the characteristics of polynomial functions. All you need to do is print & make copies for your students!

CHARACTERISTICS OF POLYNOMIAL FUNCTIONS

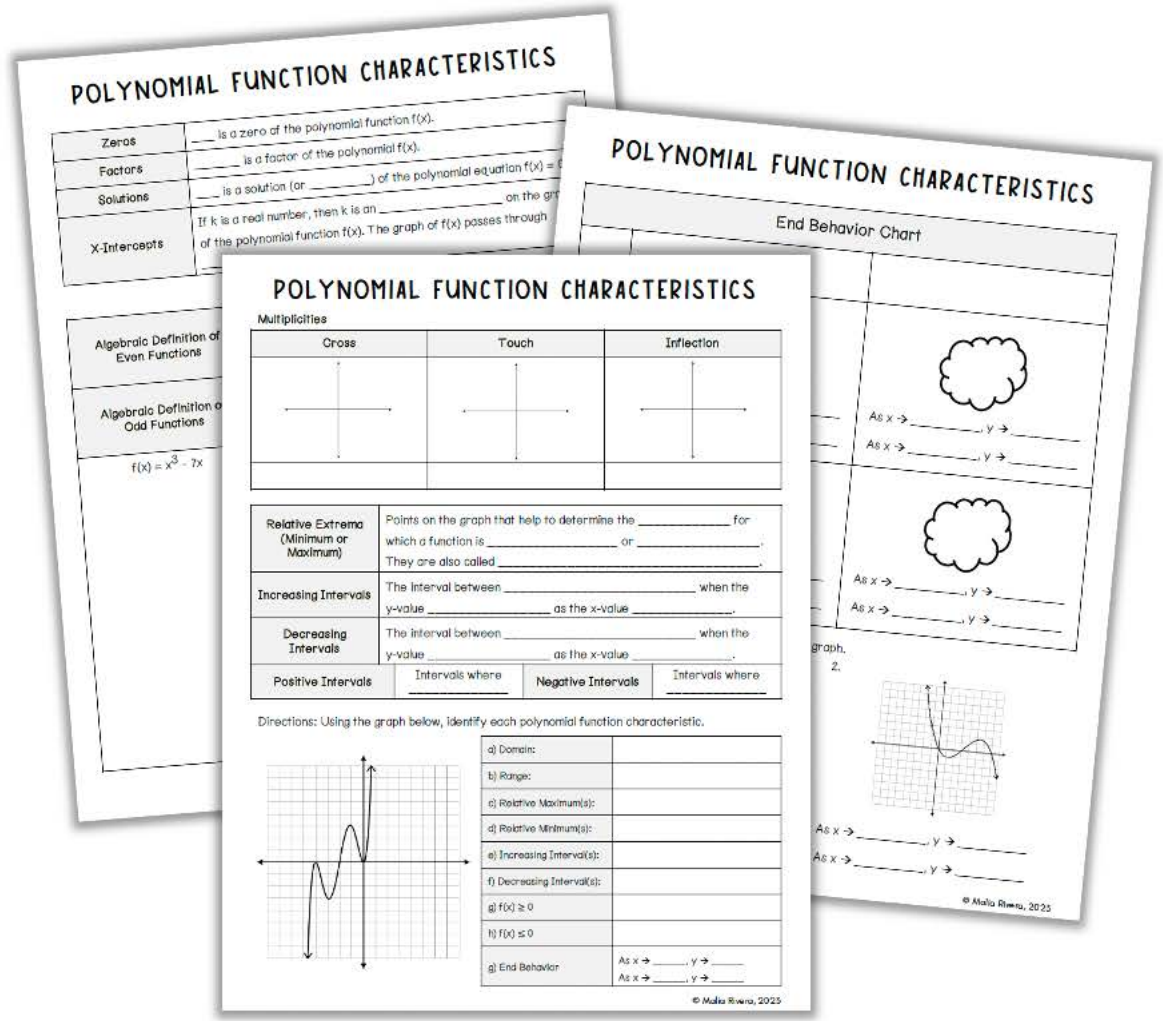
Algebra 2 Guided Notes



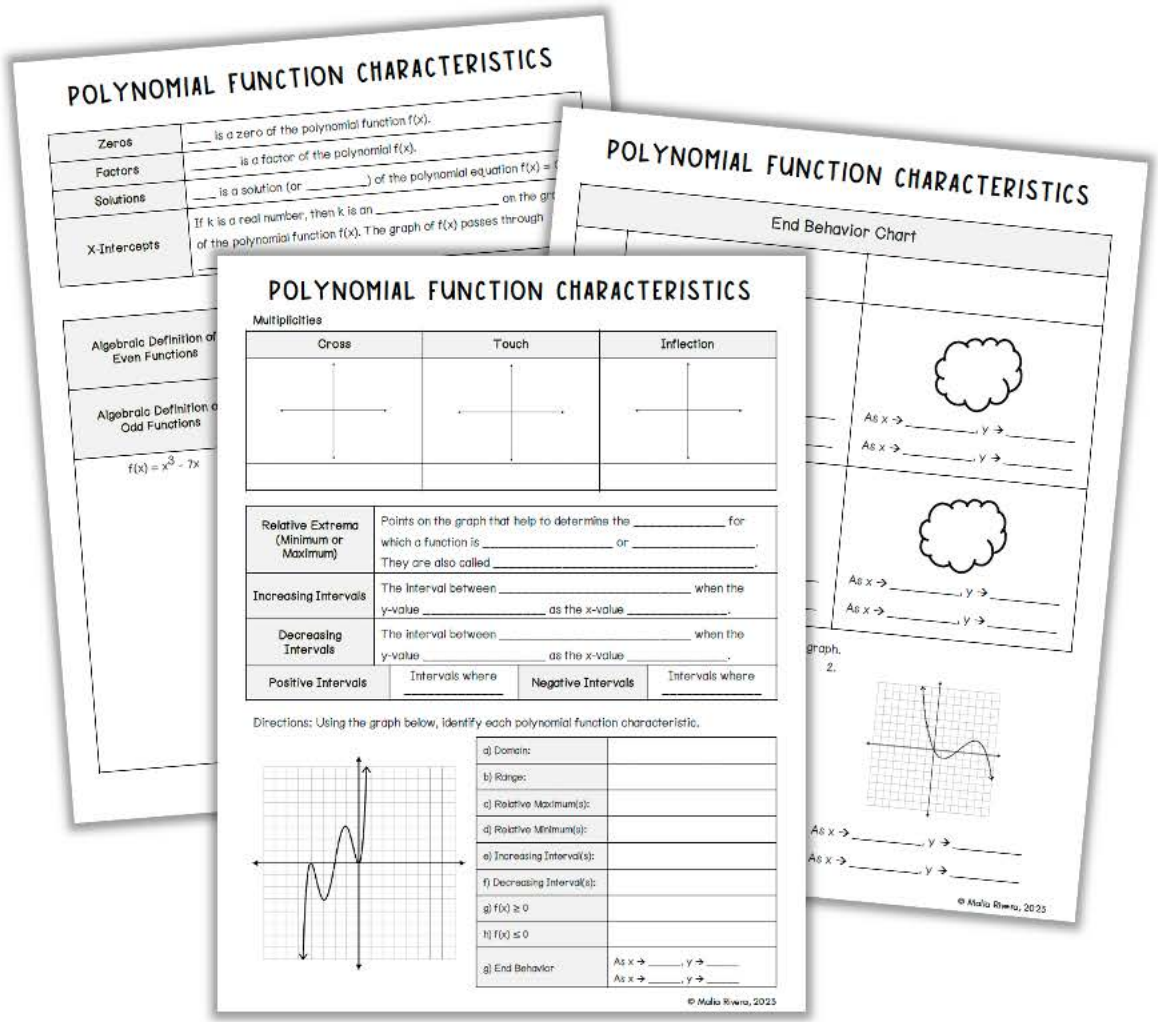
why do you need this?

- It's simple and done-for-you! Just print and make copies!
- Students can work on essential Algebra 2 skills.
- Aligns to CCSS, TEKS, and VA SOLs!
- Suggested and detailed answer keys are included for you!

Algebra 2 Guided Notes Characteristics of Polynomial Functions



Algebra 2 Guided Notes: Characteristics of Polynomial Functions *includes*:



- ✅ 3 pages of guided notes
- ✅ Even, Odd, or Neither Polynomial Functions
- ✅ End Behavior
- ✅ Multiplicities
- ✅ Relative Extrema
- ✅ Increasing and Decreasing Intervals
- ✅ Positive and Negative Intervals

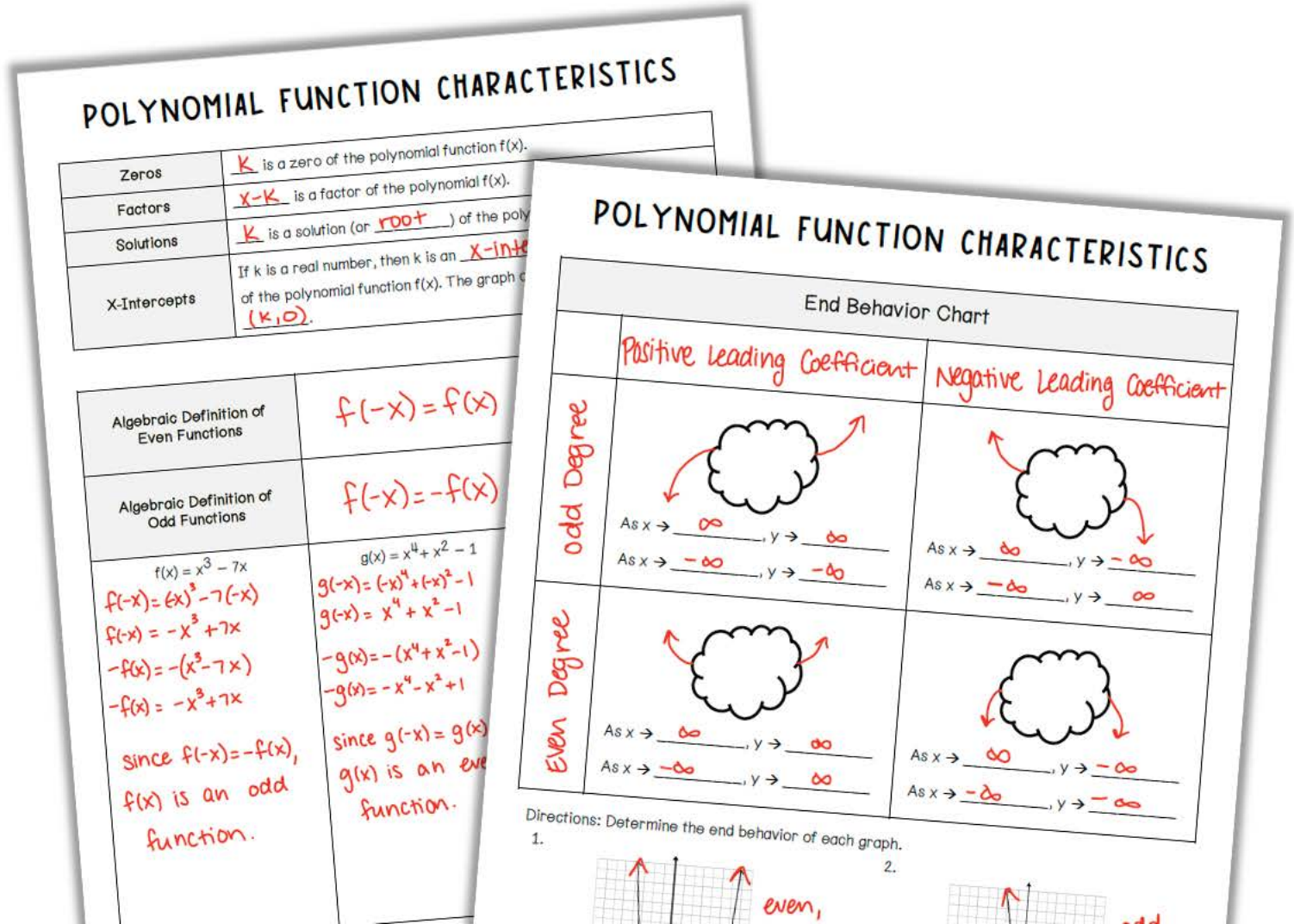
Algebra 2 Guided Notes: Characteristics of Polynomial Functions *includes*:

✅ Detailed answer keys

CCSS: HSA-APR.B.3, HSF-IF.C.7c

TEKS: P.2.I, P.2.J

VA SOL: F.AII.7bcdeh



POLYNOMIAL FUNCTION CHARACTERISTICS

Zeros	K is a zero of the polynomial function f(x).
Factors	x-K is a factor of the polynomial f(x).
Solutions	K is a solution (or root) of the poly
X-Intercepts	If k is a real number, then k is an x-inte of the polynomial function f(x). The graph (K,0).

Algebraic Definition of Even Functions	$f(-x)=f(x)$
Algebraic Definition of Odd Functions	$f(-x)=-f(x)$

$f(x)=x^3-7x$

$f(-x)=(-x)^3-7(-x)$

$f(-x)=-x^3+7x$

$-f(x)=-(x^3-7x)$

$-f(x)=-x^3+7x$

since $f(-x)=-f(x)$, f(x) is an odd function.

$g(x)=x^4+x^2-1$

$g(-x)=(-x)^4+(-x)^2-1$

$g(-x)=x^4+x^2-1$

$-g(x)=-(x^4+x^2-1)$

$-g(x)=-x^4-x^2+1$

since $g(-x)=g(x)$ g(x) is an eve function.

POLYNOMIAL FUNCTION CHARACTERISTICS

End Behavior Chart

	Positive Leading Coefficient	Negative Leading Coefficient
Odd Degree	As x → ∞, y → ∞ As x → −∞, y → −∞	As x → ∞, y → −∞ As x → −∞, y → ∞
Even Degree	As x → ∞, y → ∞ As x → −∞, y → ∞	As x → ∞, y → −∞ As x → −∞, y → −∞

Directions: Determine the end behavior of each graph.

1.

2.

even,

Check out what *other teachers* are saying:

★★★★★

"This was great practice for my Algebra II students after I presented the lesson. Next Year, I may use them as notes."

- Vonda B.

★★★★★

"Great resource for what we were currently covering in precalc!"

- Megan M.

★★★★★

"I used this in conjunction with another document, but this would have worked fine on its own. The students found it much easier to understand the concept using these guided notes."

- Cheryl W.

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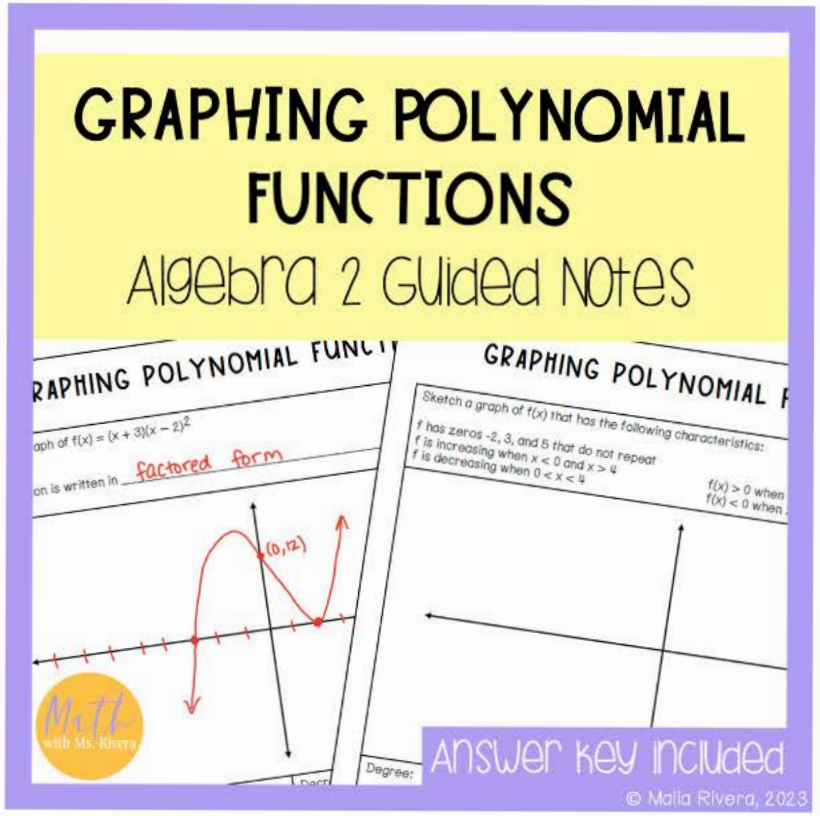

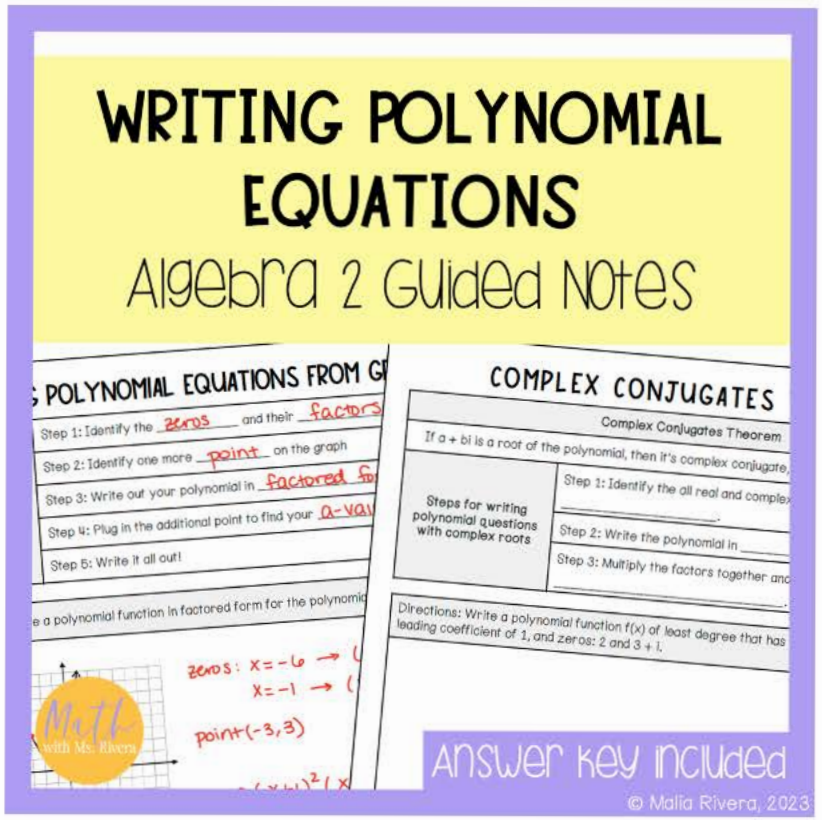

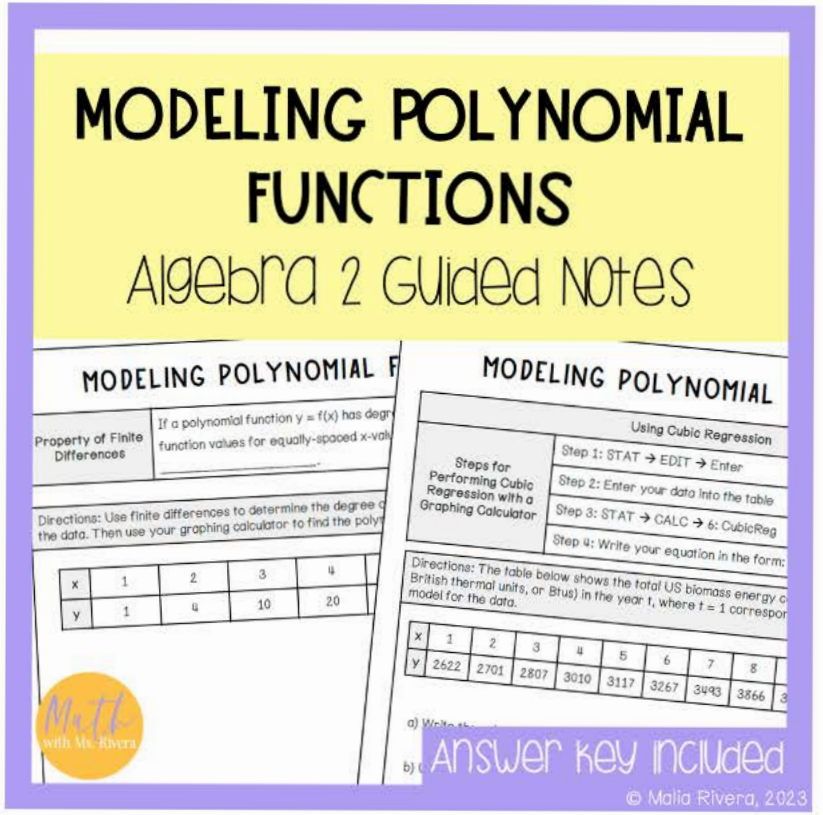

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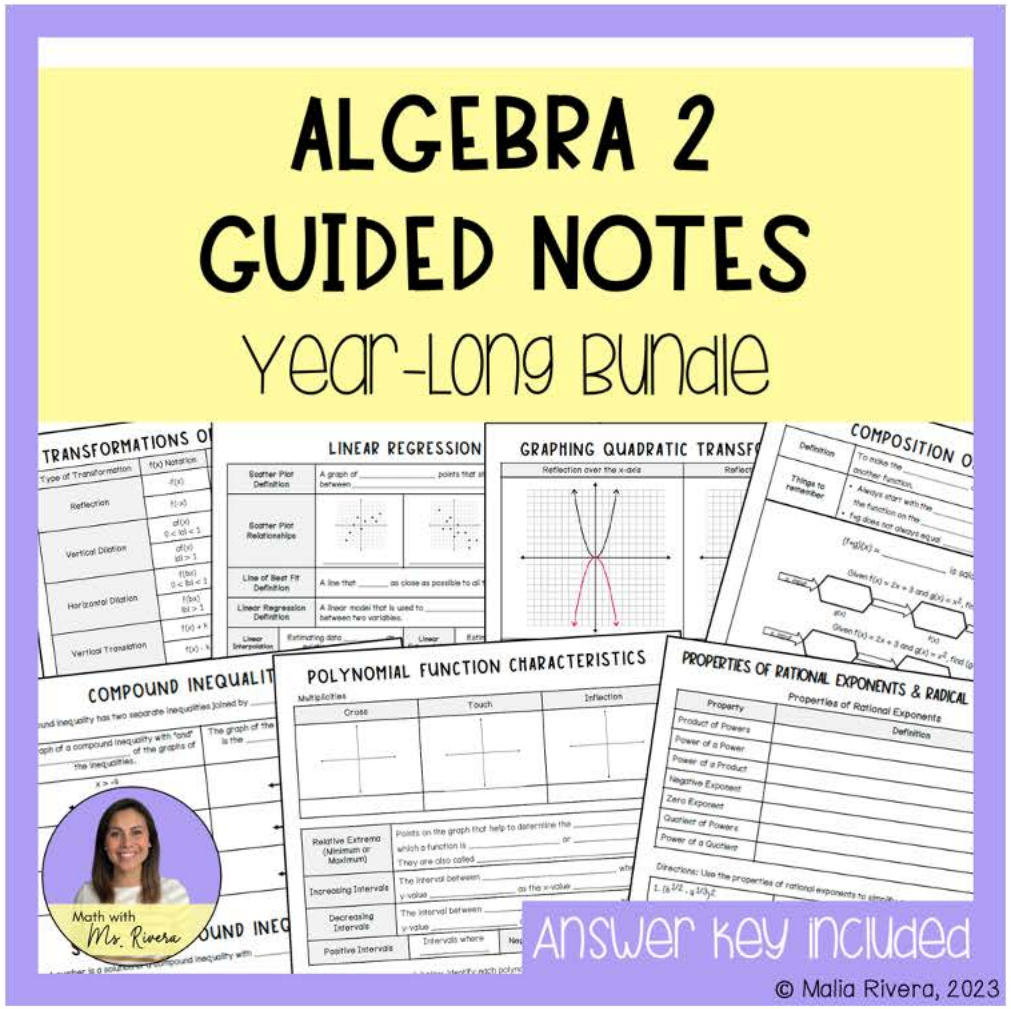

hey there!

My name is Malia and I'm passionate about making learning and practicing math fun. I love creating engaging math resources for my students and I hope your students enjoy these Characteristics of Polynomial Functions guided notes for Algebra 2 that can be used all year long!

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