keep scrolling to get a sneak peak!

This set of guided notes will walk Algebra 2 students through using the discriminant to identify types of quadratic solutions. All you need to do is print & make copies for your students!

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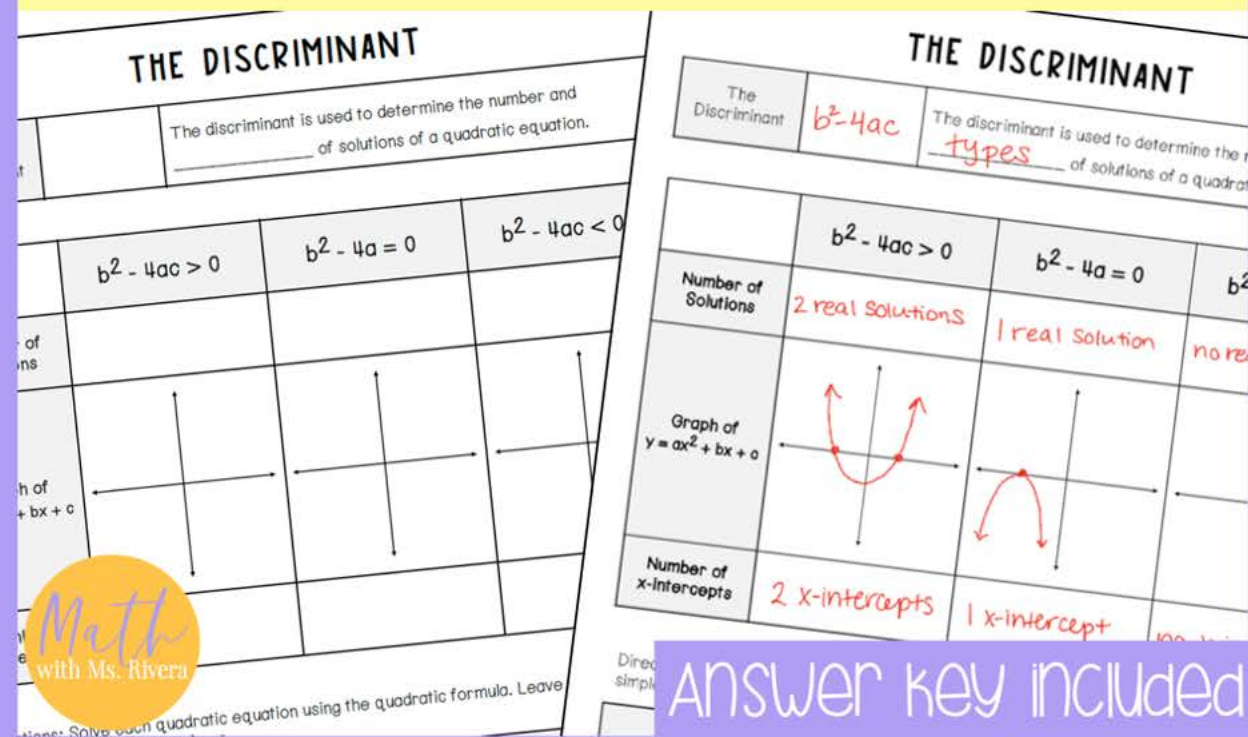
THE DISCRIMINANT

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!

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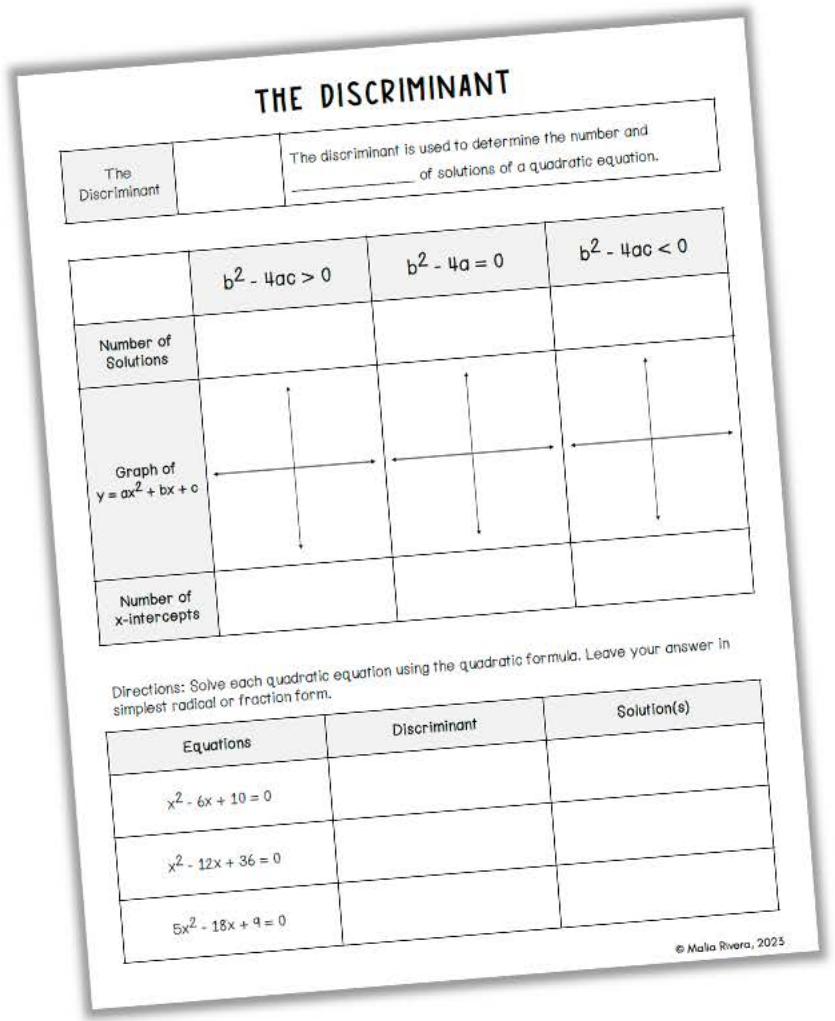
Algebra 2 Guided Notes
Using the Discriminant



THE DISCRIMINANT

The Discriminant		The discriminant is used to determine the number and _____ of solutions of a quadratic equation.

	$b^2 - 4ac > 0$	$b^2 - 4a = 0$	$b^2 - 4ac < 0$
Number of Solutions			
Graph of $y = ax^2 + bx + c$			
Number of x-intercepts			

Directions: Solve each quadratic equation using the quadratic formula. Leave your answer in simplest radical or fraction form.

Equations	Discriminant	Solution(s)
$x^2 - 6x + 10 = 0$		
$x^2 - 12x + 36 = 0$		
$5x^2 - 18x + 9 = 0$		

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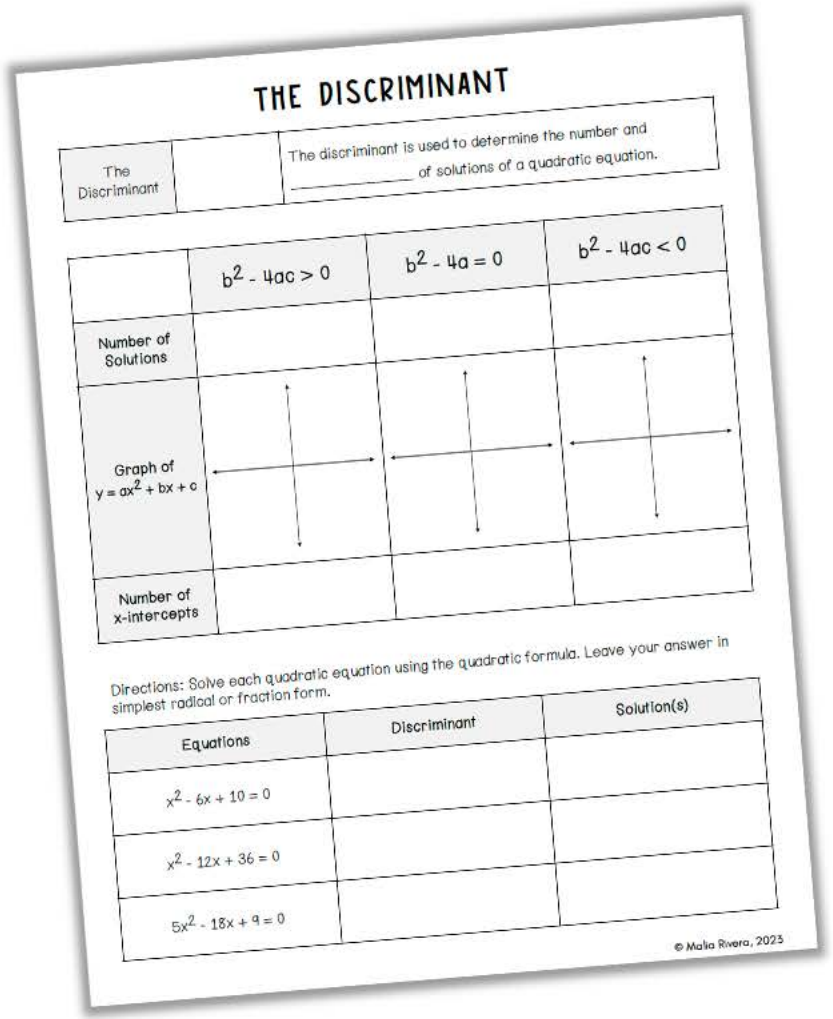
Algebra 2 Guided Notes: Using the Discriminant *includes*:



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- ✅ 1 page of guided notes
- ✅ Multiple Representations for the Discriminant
- ✅ Applying the Discriminant

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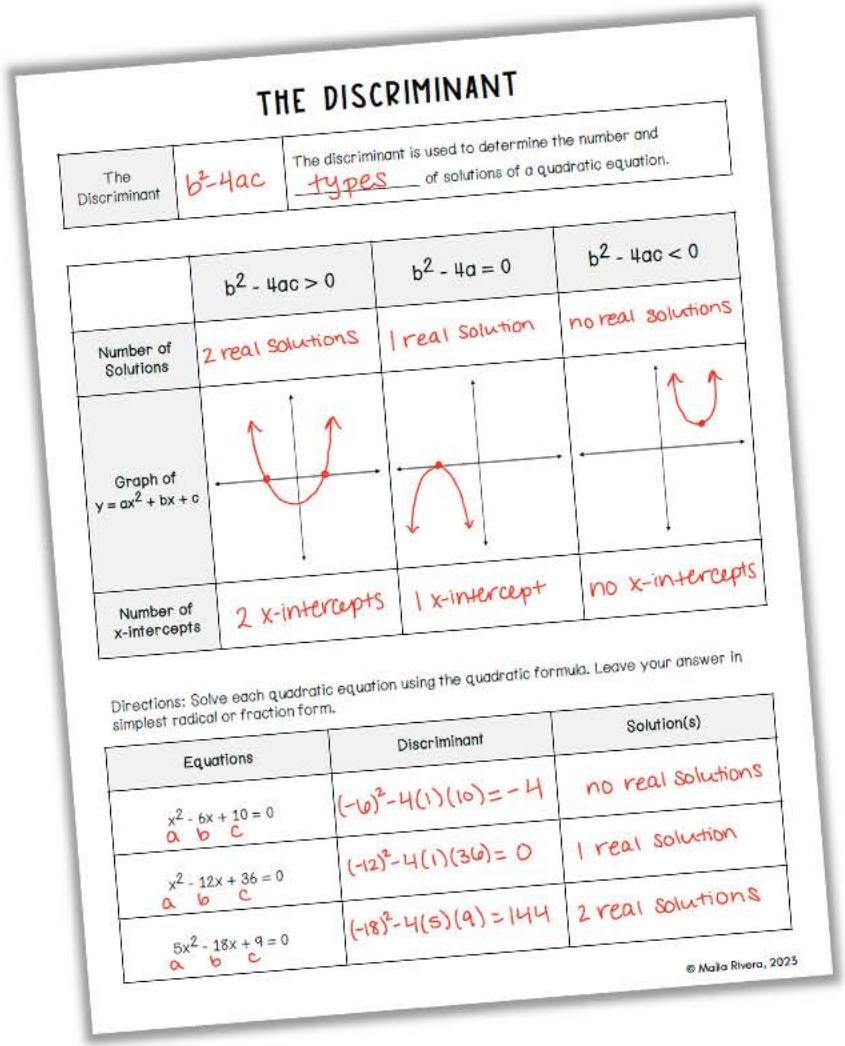
Algebra 2 Guided Notes: Using the Discriminant *includes*:

✅ Detailed answer keys

CCSS: HSA-REI.B.4

TEKS: A2.4.F

VA SOLs: EI.AII.3.b



THE DISCRIMINANT

The Discriminant	b^2-4ac	The discriminant is used to determine the number and types of solutions of a quadratic equation.

	$b^2 - 4ac > 0$	$b^2 - 4a = 0$	$b^2 - 4ac < 0$
Number of Solutions	2 real solutions	1 real solution	no real solutions
Graph of $y = ax^2 + bx + c$			
Number of x-intercepts	2 x-intercepts	1 x-intercept	no x-intercepts

Directions: Solve each quadratic equation using the quadratic formula. Leave your answer in simplest radical or fraction form.

Equations	Discriminant	Solution(s)
$x^2 - 6x + 10 = 0$ (a b c)	$(-6)^2-4(1)(10)=-4$	no real solutions
$x^2 - 12x + 36 = 0$ (a b c)	$(-12)^2-4(1)(36)=0$	1 real solution
$5x^2 - 18x + 9 = 0$ (a b c)	$(-18)^2-4(5)(9)=144$	2 real solutions

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★★★★★

"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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PROJECTILE MOTION
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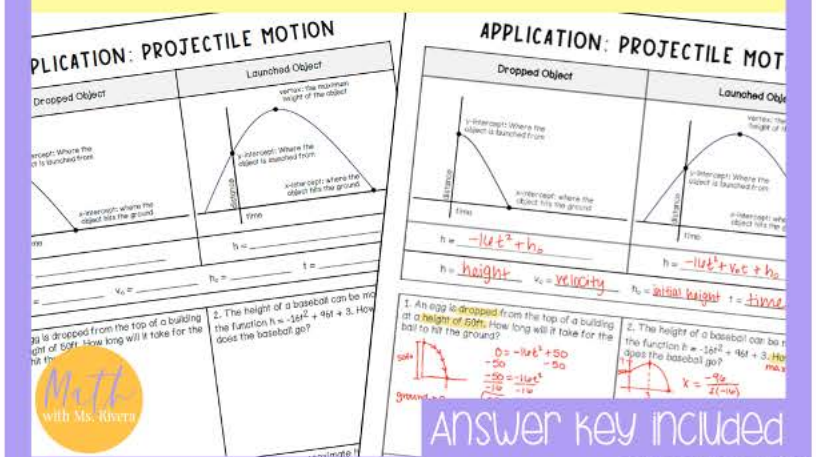

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IMAGINARY NUMBERS
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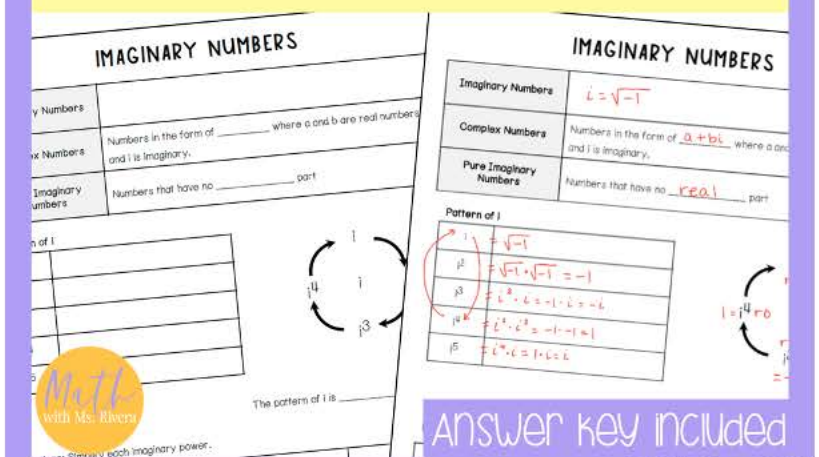

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COMPLEX NUMBERS
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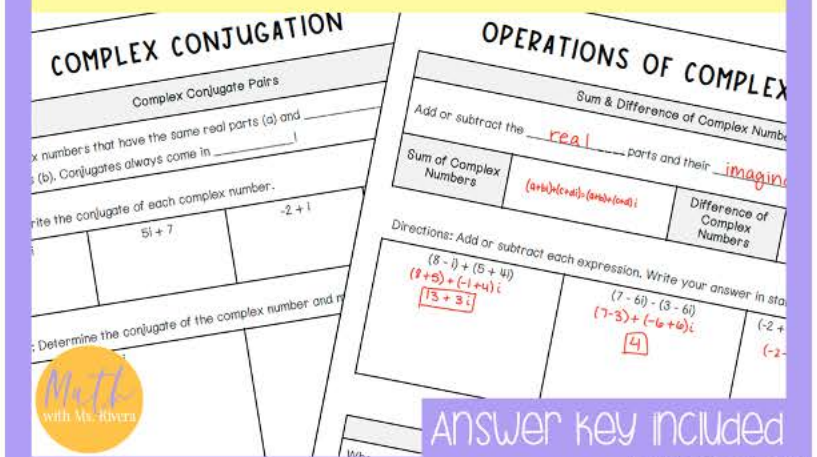

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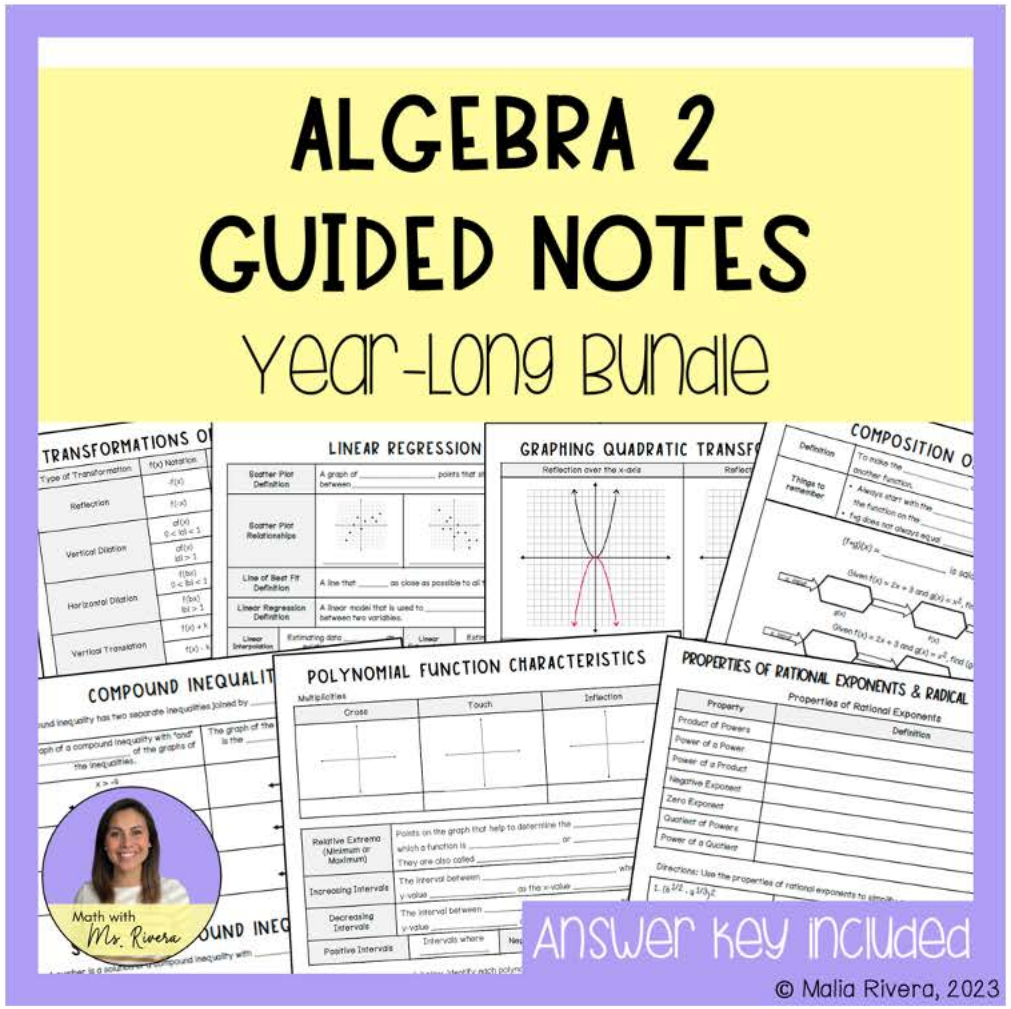

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hey there!

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 Using the Discriminant guided notes for Algebra 2 that can be used all year long!

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