

Secrets, Lies and Algebra

by Wendy Lichtman

About the book: Tess loves math because it's the one subject she can trust—there's always just one right answer, and it never changes. But then she starts algebra and is introduced to those pesky and mysterious variables, which seem to be everywhere in eighth grade. When even your friends and parents can be variables, how in the world do you find out the right answers to the really important questions, like what to do about a boy you like or whom to tell when someone's done something really bad? Will Tess's life ever stop changing long enough for her to figure it all out?

Awards for the book: Bank Street College Best Children's Books of 2008; Northern California Book Awards, Best Children's Literature of 2007; Cynsational Best Books of 2008; Georgia Children's Book Award Nominee, 2009-2010

About the author: Wendy Lichtman is the author of several novels for young readers, including the follow-up to this book, *Do the Math: The Writing on the wall*. . She holds a degree in mathematics and has tutored public-school students in algebra for several years. When she decided to write about a teenage girl who realizes that some questions have more than one right answer, algebra, with its unknowns and variables seemed a perfect metaphor. Wendy Lichtman lives in Berkeley, California. You can visit her online at www.wendylightman.com

Author interview:

1. **How did you decide to integrate math into Tess's story?** *I love math, and in fact my BA is in that subject. But I never used it in my writing until I thought about how I wanted to tell this particular story: At the heart of Secrets, Lies and Algebra is a questionable death—and algebra, which explore unknowns and variables, and in which some problems have more than one solution, seemed a perfect metaphor.*
2. **Do you jump into a story and see where it will lead or map it all out first?** **Why?** *I jump in. One of the reasons I love first drafts is that I can be as creative as possible—I give myself a lot of leeway when I begin. When I see the story forming, then, yes, I begin to map it out.*

Pre-reading:

Math inspires either a dogged devotion or an intense repulsion. Why do you think this is? What does it reveal about someone who likes math? Why, do you think, have girls been

depicted as not liking or having success in math? How can these stereotypes be overcome?

Discussion guide:

1. "...since who you're greater than ($>$) and who you're less than ($<$) is kind of the point of eighth grade." (p.3) Do you agree that middle school is all about this ranking of people? When do you think this disappears? Why is it so pervasive during this time?
2. How does creating the graphs help Tess sort through her thinking about what happened to Nina? Do you think her mother should've talked to her no matter what? What helps you sort through your own thinking?
3. Why is Tess's mom suspicious of Rob for his wife's death? Would you want to go to the police or not? Why?
4. Why is Tess suddenly disappointed in both algebra and her mother? What things do you rely on to stay consistent in your life?
5. Tess seems conflicted about telling on Richard though she's certain her mom should tell on Rob. Are there times to tell and times to stay silent? How do you know the difference?
6. Tess tells Miranda and Sammy the secret about Robt. Who could you trust with such an important secret? With whom could you create a Venn diagram? With whom would you have an empty set?
7. Discuss why the death of Nina is more like a theorem than an axiom. Can you see Tess's mom's point about not telling too?
8. Do you think it's wise that Tess and Sammy went looking for evidence at Rob's house? Why or why not? Can you see things that aren't really there when you're looking for them? What evidence did they find?
9. Who betrayed Tess's secret? How does she know? Can you keep a secret? Is it necessary for friendship?
10. Do you think Ms. Saltzman is a good math teacher? What qualities make the best teachers? Do you, like Tess, have difficulty concentrating on school when faced with problems?
11. List all the problems Tess is facing in the novel. Which one would be most disturbing for you? Why? How do you think she should handle each of them?
12. Have you ever had a boomerang moment with your own parents?
13. What symbol does Tess use to define herself? What does she use for her friends? What symbol would best represent you? Why?
14. How many people benefited from Richard's pilfering of the test? Is it fair? Should Tess tell? How is it resolved?
15. How does Mr. Wright discover something went wrong with the tests? Do you think the state tests are given too much importance in the curriculum? Do these tests make you nervous?
16. Why does Tess decide to tell what she believes about Richard and the test? Would you?
17. What connections does Tess finally make between her relationship with her friends and what happened with her mom? What do you think she's learned?

18. Describe what happened at the dance. Is this typical for middle school events?
19. Do you think it's obvious that Damien and Tess like each other? How do they react around one another? Predict what you think will happen six months after the close of the novel.
20. Lynn drives Tess a little crazy by always saying that something happened to her and repeating information that isn't her business. Are there other traits that drive you crazy too? How can you handle a person like Lynn?

Across the curriculum:

Reading:

Good readers make predictions about their books as they read based on what they know about the characters, evidence they've gathered while reading and their knowledge of story structure. At the end of each chapter make a prediction about what you think will happen next and why. Remember that predictions are often wrong and that's fine (if we always knew what would happen few of us would keep reading!)

Writing:

Wendy Lichtman uses math to bring Tess's story to life. Using your own passion (soccer, dance, music) use terms from that hobby to illuminate a friendship story of your own.

Art:

Create a collage that incorporates images from the story as well as mathematical formulas. Explain your choice of color, design, forms and formulas in a brief artist's statement on the back.

Math:

As you read the novel fill out the following graphic organizer. Use it to jump off discussion in both math and reading:

Term:	Definition:	Example:	Why it's important to the story:
Tangent			
Tesselation			
DNE			
Infinite			
Venn Diagram			

Empty Set			
Axiom			
Theorem			
Quadratic Equation			
Prime numbers			
Imaginary #'s			
Additive Property of Equality			
Extraneous Solution			
Asymptotes			
Line			
Line segment			

This guide was created by [Tracie Vaughn Zimmer](#), a reading specialist and children's author, visit her website to find hundreds of guides to children's and young adult literature.