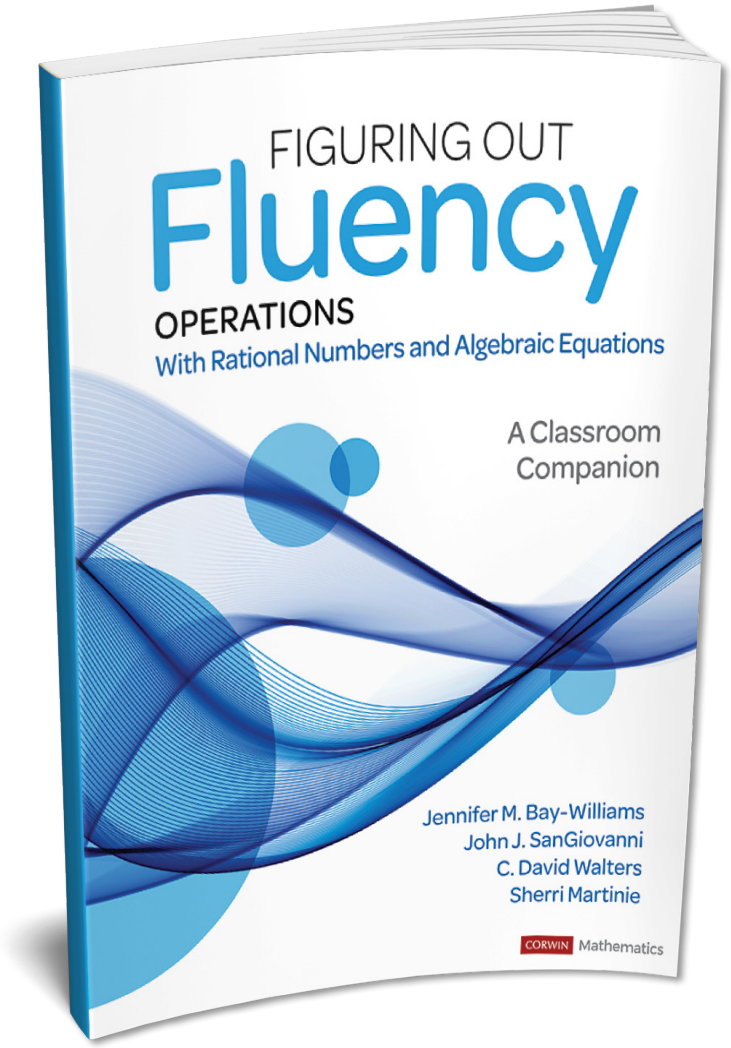

Thank you

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ACTIVITY 7.7

Name: "Would You Rather . . ." **Type:** Routine

Version 1: Choose a Strategy

About the Routine: There are two versions of this routine with systems of linear equations—choosing different strategies (e.g., Use Tables or Use Graphs) and making choices within a strategy (e.g., For which variable will I substitute? Or Which variables will I eliminate?).

Materials: No materials are needed for this routine.

Directions:

Version 1: Focus on Choosing a Strategy

1. Post a "Would You Rather . . ." situation. Use numbers that will lend to different reasoning strategies.
2. Ask a "Would You Rather . . . ?" question to prompt student to evaluate and then choose between two strategies.
3. Provide time for students to silently make a decision and then solve the problem with their choice.
4. Have students discuss both ways (either having students pair with someone who solved it the opposite way, or have someone share each way to the whole class).
5. Again ask, "Would you rather Make a Graph or Use Substitution to solve the system?" This time ask students to explain why.
6. Repeat with additional "Would you rather . . ." examples. Include examples wherein both named strategies are a good fit and when only one of them is a good fit.

For example, a teacher posts the following system of equations and asks, "Would you rather Make a Table or Use Substitution to solve the system?" Tables (and graphs) can be generated very efficiently using technology, such as a graphing calculator.

$$y = 2x - 5$$

$$y = {}^{-}x + 7$$

Make a Table

x	$2x-5$	$^{-}x+7$
$^{-}2$	$^{-}9$	9
$^{-}1$	$^{-}7$	8
0	$^{-}5$	7
1	$^{-}3$	6
2	$^{-}1$	5
3	1	4
4	3	3

Use Substitution

$2x-5=-x+7$

$3x-5=7$

$3x=12$

$x=4$

$y=2(4)-5$

$y=3$