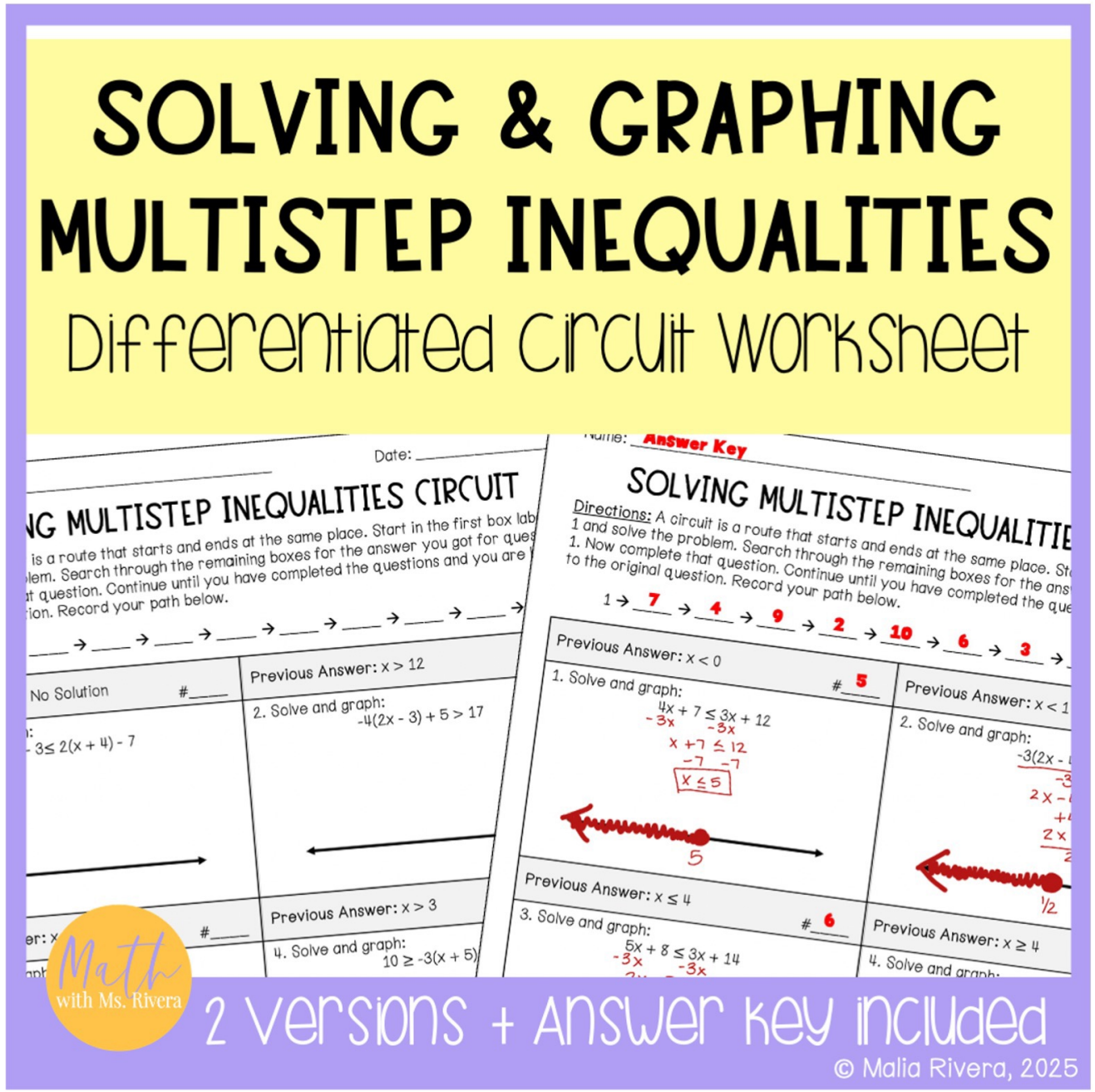
keep scrolling to get a sneak peek!

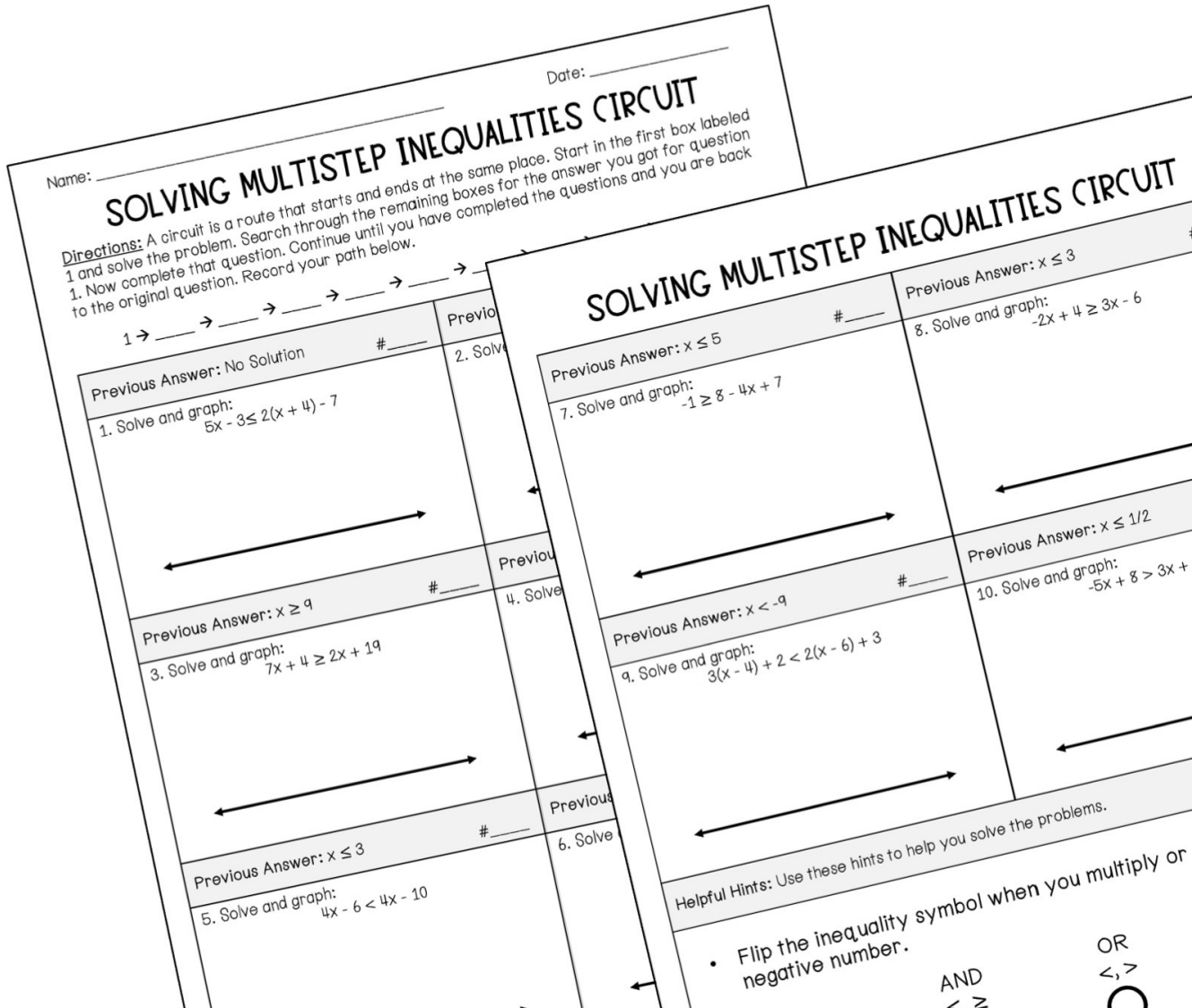
Help your Algebra students practice **solving and graphing multistep equations**. Students will be eager to get the self-checking benefits from this circuit activity!



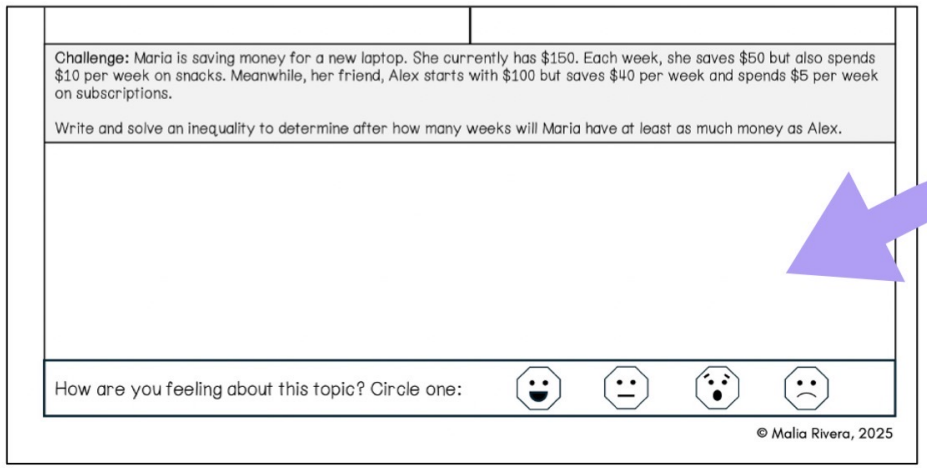
Solving & Graphing Multistep Inequalities Circuit

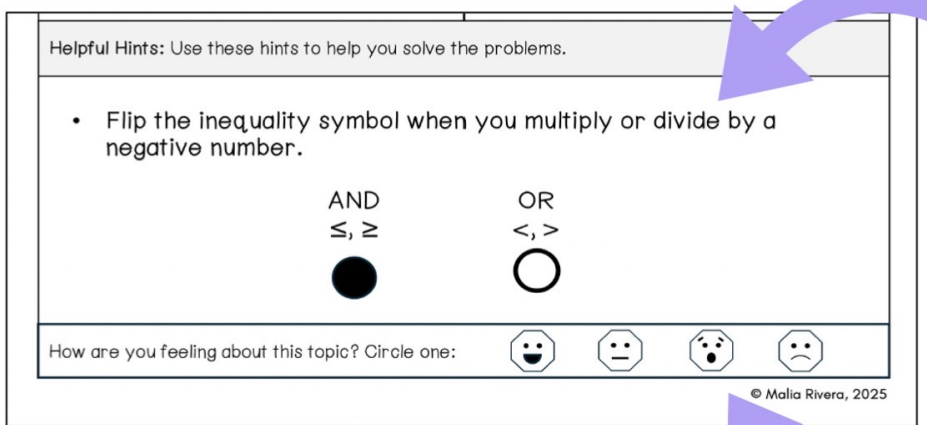
why do you need this?

- It's self-checking! Your students will know if they are correct or not.
- 2 differentiated versions for all students practice this essential math skill.



Multistep Inequalities Circuit *includes*:





- ✅ 10 self-checking problems
- ✅ a detailed answer key
- ✅ a standard version with an extension question
- ✅ a basic version with helpful hints section
- ✅ student self assessment

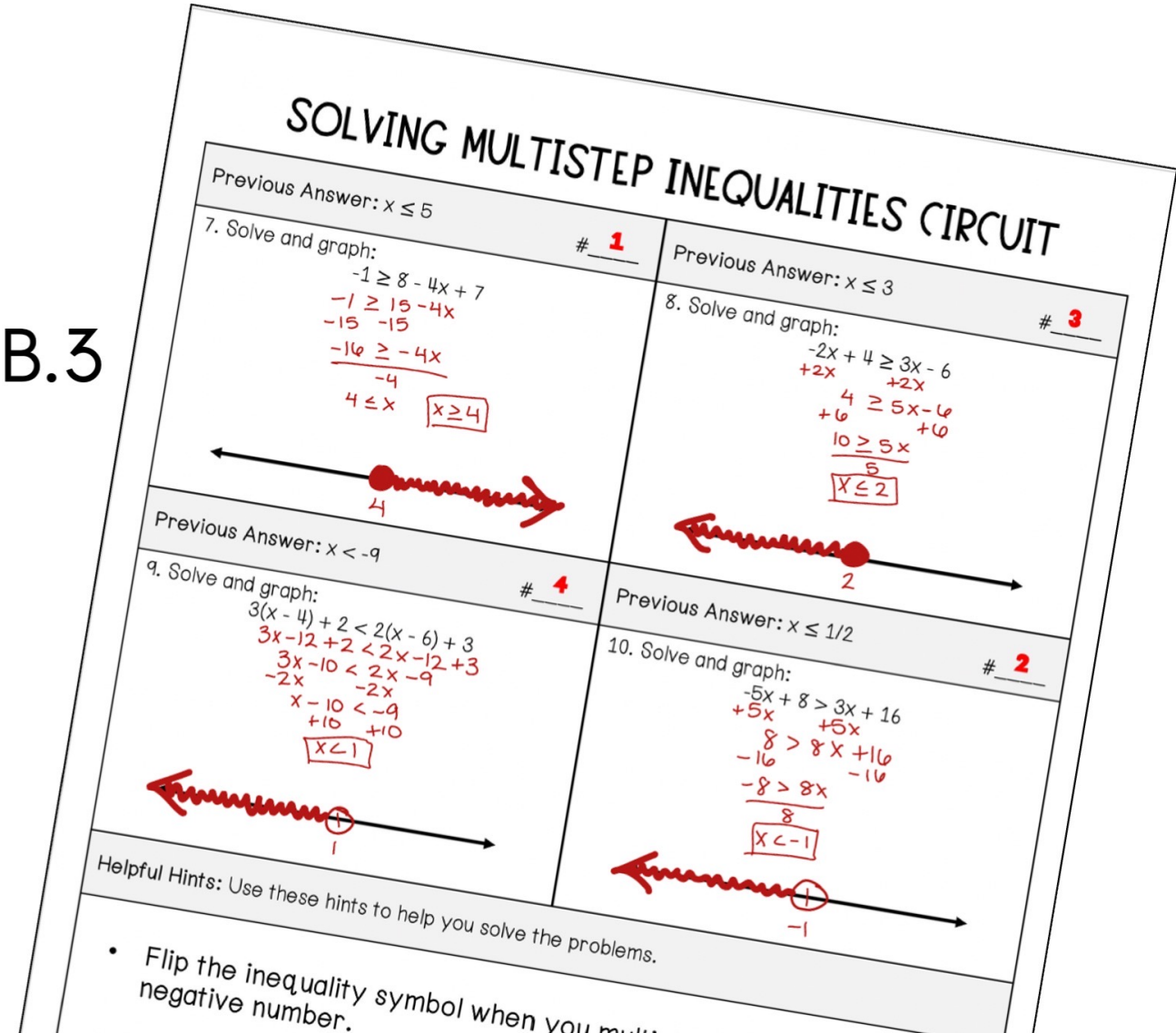
Solving & Graphing Multistep Inequalities

standards covered:

CCSS: HSA-CED.A.1, HSA-REI.B.3

TEKs: A1.5.B, A1.12.E

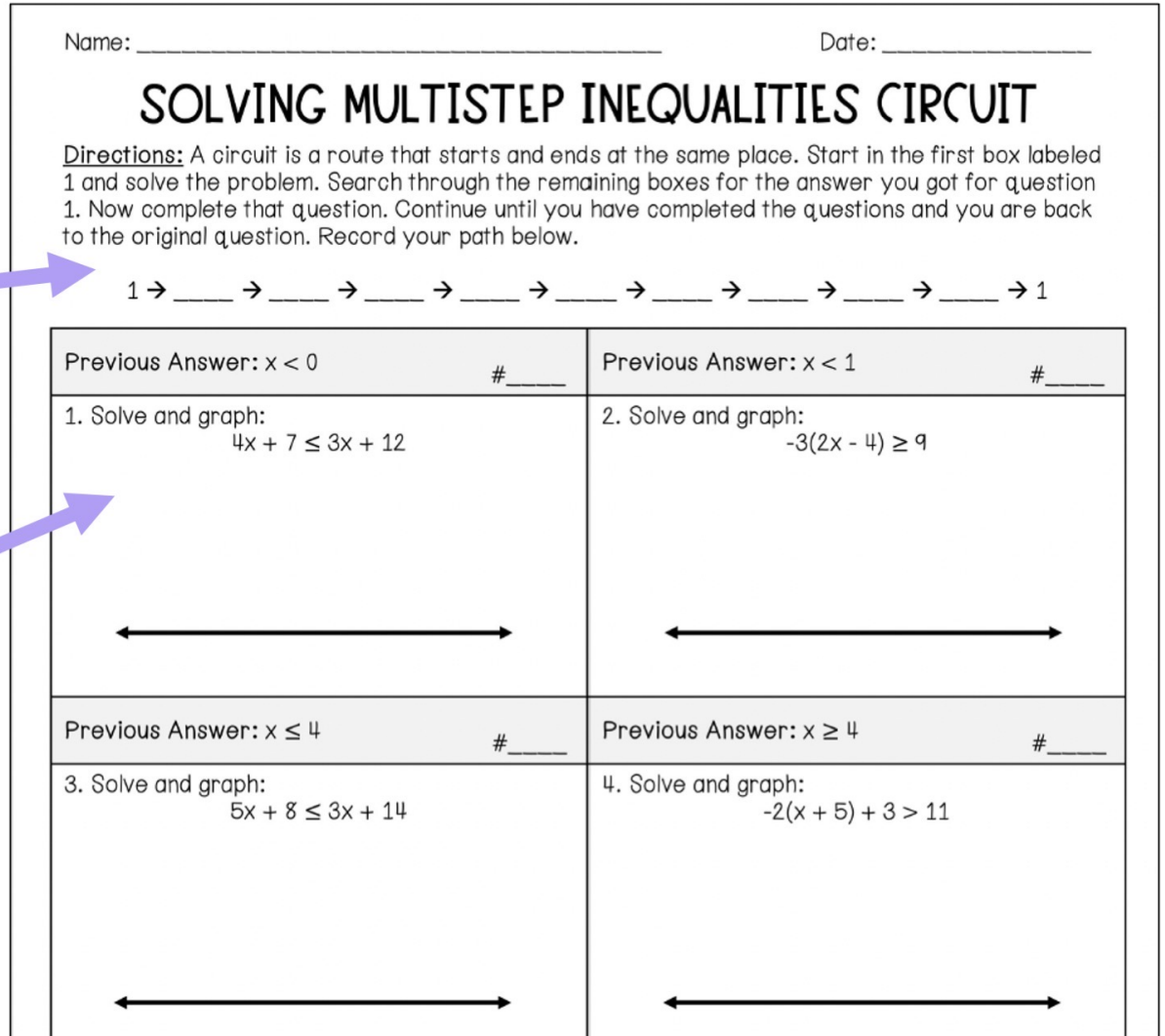
VA SOLs: EI.A.5.a



how this circuit resource works

Students can track their path at the top.

Students start with the first question.



Name: _____ Date: _____

SOLVING MULTISTEP INEQUALITIES CIRCUIT

Directions: A circuit is a route that starts and ends at the same place. Start in the first box labeled 1 and solve the problem. Search through the remaining boxes for the answer you got for question 1. Now complete that question. Continue until you have completed the questions and you are back to the original question. Record your path below.

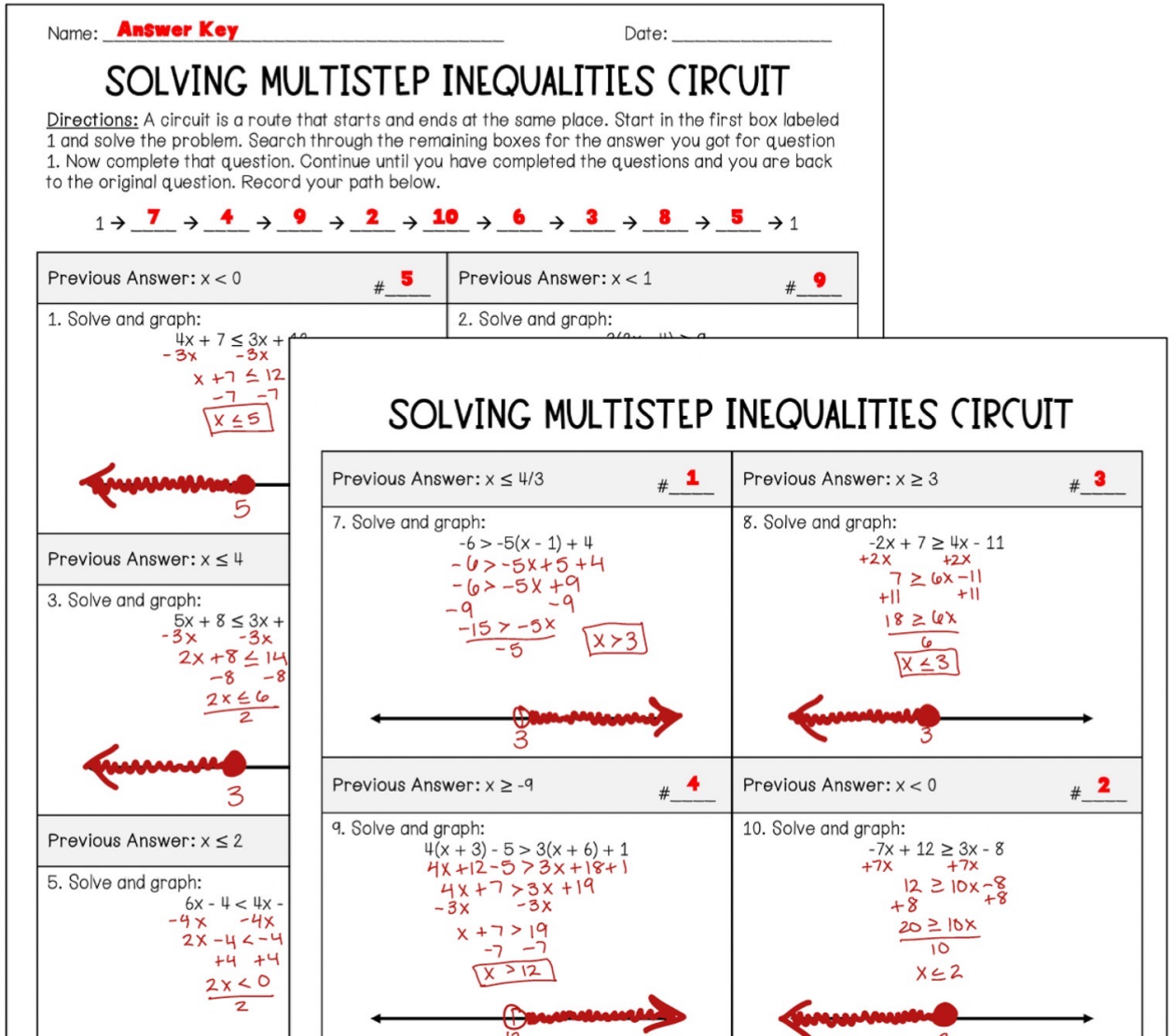
1 → ____ → ____ → ____ → ____ → ____ → ____ → ____ → ____ → ____ → 1

Previous Answer: $x < 0$ #____	Previous Answer: $x < 1$ #____
1. Solve and graph: $4x + 7 \leq 3x + 12$	2. Solve and graph: $-3(2x - 4) \geq 9$
Previous Answer: $x \leq 4$ #____	Previous Answer: $x \geq 4$ #____
3. Solve and graph: $5x + 8 \leq 3x + 14$	4. Solve and graph: $-2(x + 5) + 3 > 11$

Then search for their answer on the worksheet. Once the answer is found, students complete the problem below it.

The last question they answer should lead back to problem #1 to "close" the circuit.

how to use this resource



Name: Answer Key Date:

SOLVING MULTISTEP INEQUALITIES CIRCUIT

Directions: A circuit is a route that starts and ends at the same place. Start in the first box labeled 1 and solve the problem. Search through the remaining boxes for the answer you got for question 1. Now complete that question. Continue until you have completed the questions and you are back to the original question. Record your path below.

1 → 7 → 4 → 9 → 2 → 10 → 6 → 3 → 8 → 5 → 1

Previous Answer: x < 0 #5

1. Solve and graph:

$4x + 7 \leq 3x +$

$-3x \quad -3x$

$x + 7 \leq 12$

$-7 \quad -7$

$x \leq 5$

5

Previous Answer: x < 1 #9

2. Solve and graph:

Previous Answer: x ≤ 4

3. Solve and graph:

$5x + 8 \leq 3x +$

$-3x \quad -3x$

$2x + 8 \leq 14$

$-8 \quad -8$

$\frac{2x \leq 6}{2}$

3

Previous Answer: x ≤ 2

5. Solve and graph:

$6x - 4 < 4x -$

$-4x \quad -4x$

$2x - 4 < -4$

$+4 \quad +4$

$\frac{2x < 0}{2}$

SOLVING MULTISTEP INEQUALITIES CIRCUIT

Previous Answer: x ≤ 4/3 #1

7. Solve and graph:

$-6 > -5(x - 1) + 4$

$-6 > -5x + 5 + 4$

$-6 > -5x + 9$

$-9 \quad -9$

$\frac{-15 > -5x}{-5}$

$x > 3$

3

Previous Answer: x ≥ 3 #3

8. Solve and graph:

$-2x + 7 \geq 4x - 11$

$+2x \quad +2x$

$7 \geq 6x - 11$

$+11 \quad +11$

$\frac{18 \geq 6x}{6}$

$x \leq 3$

3

Previous Answer: x ≥ -9 #4

9. Solve and graph:

$4(x + 3) - 5 > 3(x + 6) + 1$

$4x + 12 - 5 > 3x + 18 + 1$

$4x + 7 > 3x + 19$

$-3x \quad -3x$

$x + 7 > 19$

$-7 \quad -7$

$x > 12$

Previous Answer: x < 0 #2

10. Solve and graph:

$-7x + 12 \geq 3x - 8$

$+7x \quad +7x$

$12 \geq 10x - 8$

$+8 \quad +8$

$\frac{20 \geq 10x}{10}$

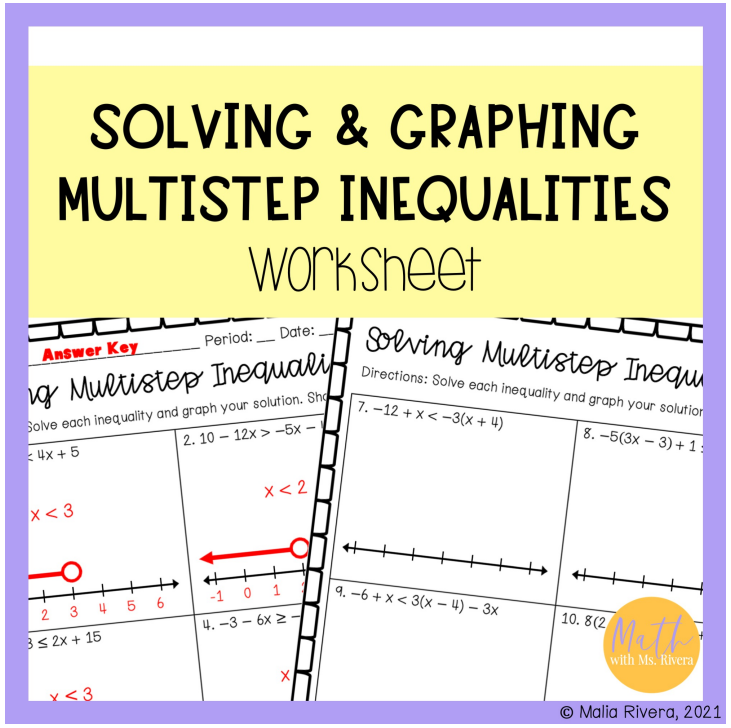
$x \leq 2$

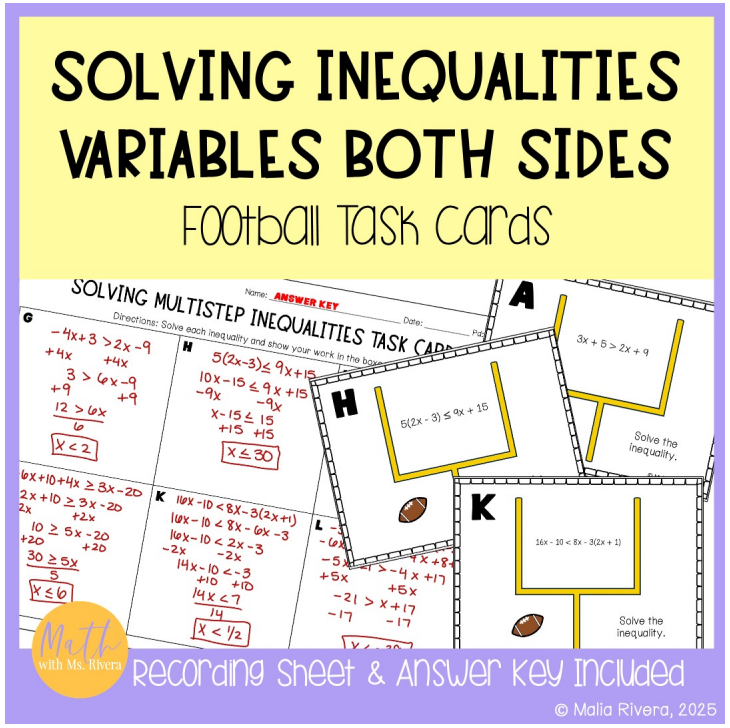
This is a great activity to use when reviewing solving absolute value equations.

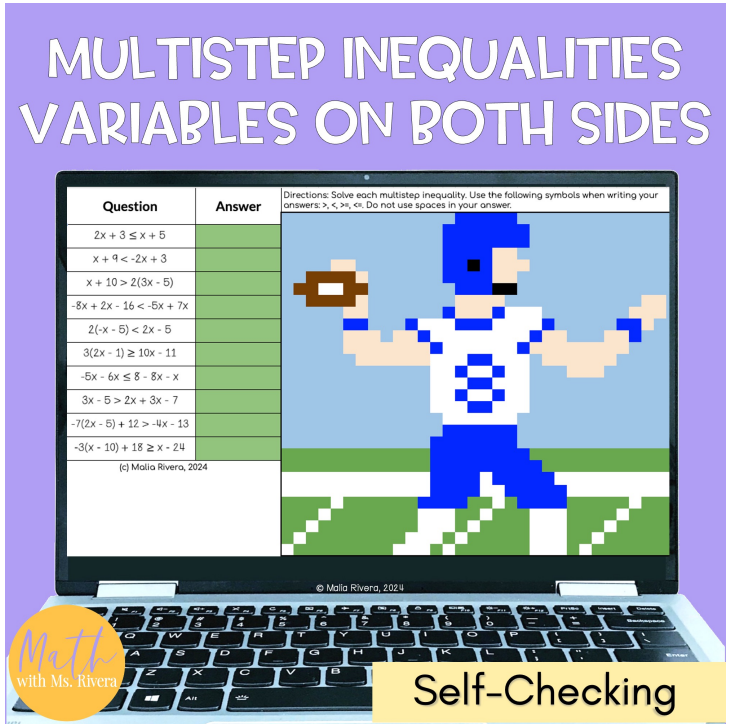
It can be used right after teaching the concept or as homework.

This is also a **substitute-friendly** assignment!

You may also *enjoy*...





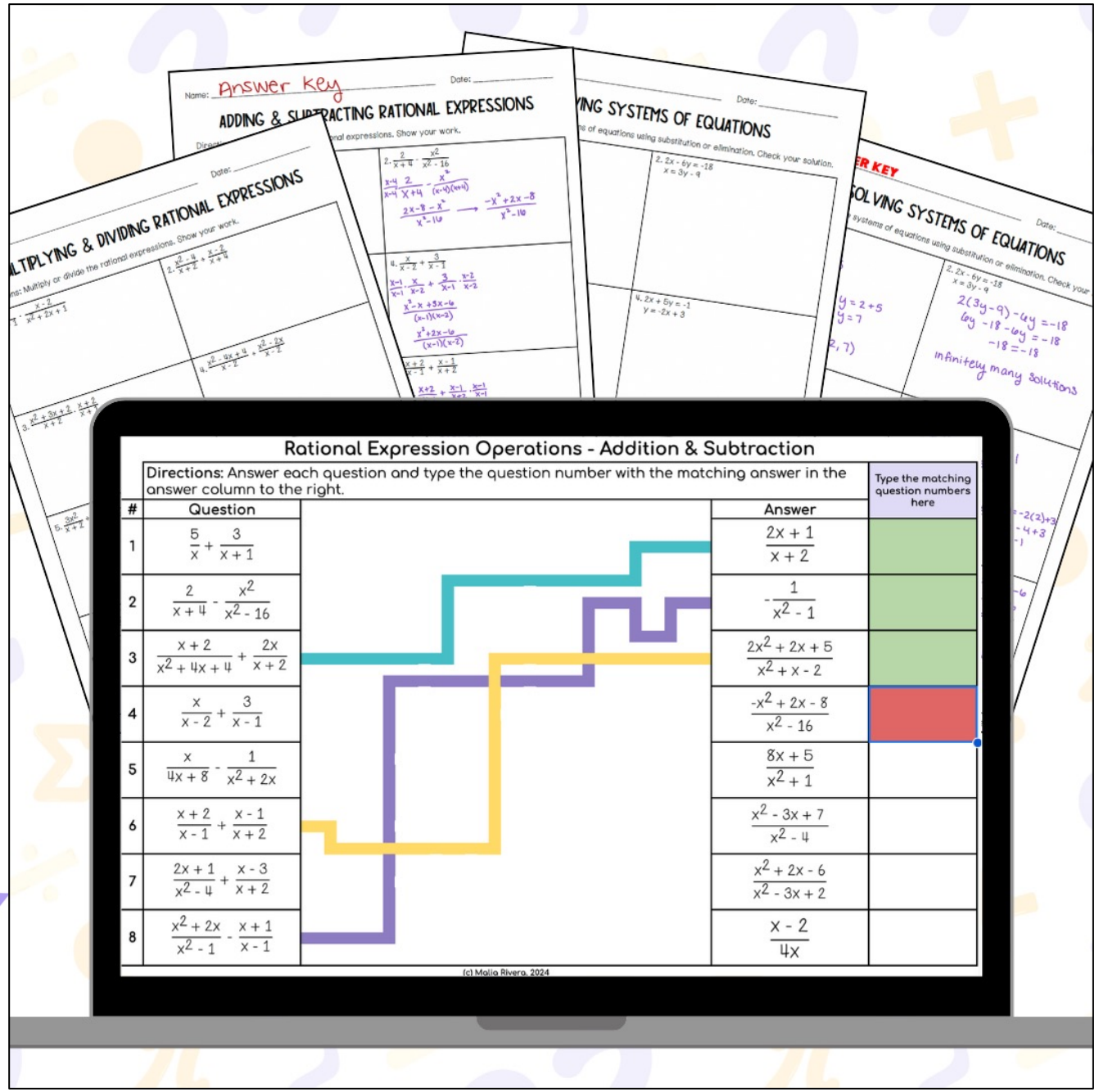


Free Algebra Activities!

When you join my email list, I'll send you a free Algebra print & digital self-checking activities. There is an Algebra 1 and Algebra 2 version!

You'll also be getting exclusive freebies and content to help your Algebra students be successful this school year!

check it out!



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 this activity too!

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