

keep scrolling to
get a sneak peek!

Help your PreAlgebra & Algebra 1 students practice **solving & graphing multistep inequalities with variables on one side by combining like terms**. Your students will benefit from being given choice when it comes to how they want to practice math!

SOLVING INEQUALITIES COMBINING LIKE TERMS

CHOICE BOARD

Math with Ms. Rivera

ANSWER KEY

Solving & Graphing Inequalities - Variables on One Side

Directions: Choose _____ problems from each column. Show your work in the boxes.

15x + 16 - 6 > 45
15x + 10 > 45
-10 -10
15x > 35
15 15
x > 2.33

2x + 5x > 63
7x > 63
x > 9

-10 + 7x + 21 ≤ -80
11 + 7x ≤ -80
-11 -11
7x ≤ -91
7 7
x ≤ -13

4x + 1 - 5x ≤ -3
-x + 1 ≤ -3
-x ≤ -4
-1 -1
x ≥ 4

144 > -6 - 3x - 18
144 > -3x - 24
+24 +24
168 > -3x
-3 -3
-56 < x or x > -56

-18 ≤ 7x + 4x
-18 ≤ 11x
-28 ≤ 4x
-7 ≤ x or x > -7

7 + 2x - 8 + 3x < 9
-1 + 5x < 9
5x < 10
x < 2

-12x + 3x + 16 - 4
-9x + 12 < 4
-9x < -8
x > 0.88

x - 18
-18 ≤ 7x + 10 - 3x
-18 ≤ 4x + 10
-28 ≤ 4x
-7 ≤ x or x > -7

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Why do you need this?

Solving Multistep Inequalities Variables on One Side Choice Board



Allowing student choice in how they practice will encourage them to do the practice!



You can differentiate by the number of problems required of particular students.

Name: _____ Date: _____ Period: _____

Solving & Graphing Inequalities - Variables on One Side

Directions: Choose _____ problems from each column. Show your work in the boxes.

$15x + 16 - 6 > 45$ $2x + 5x > 63$ $7 + 2x - 8 + 3x < 9$

$-10 + 7x + 21 \leq -80$ $4x + 1 - 5x \leq -3$

$144 > -6 - 3x - 18$ $-18 \leq 7x + 10 - 3$

$-8 + 12x - 16 + 2 < 14$ $27 > -8x + x - 1$

$66 \leq 18 - 14 - 2x - 6$ $80 \geq 3x - 4x - 5 - 4$

ANSWER KEY

Name: _____ Date: _____ Period: _____

Solving & Graphing Inequalities - Variables on One Side

Directions: Choose _____ problems from each column. Show your work in the boxes.

$15x + 16 - 6 > 45$
 $15x + 10 > 45$
 $15x > 35$
 $x > 2.33$

$2x + 5x > 63$
 $7x > 63$
 $x > 9$

$7 + 2x - 8 + 3x < 9$
 $5x - 1 < 9$
 $5x < 10$
 $x < 2$

$-10 + 7x + 21 \leq -80$
 $11 + 7x \leq -80$
 $7x \leq -91$
 $x \leq -13$

$4x + 1 - 5x \leq -3$
 $-x + 1 \leq -3$
 $-x \leq -4$
 $x \geq 4$

$144 > -6 - 3x - 18$
 $144 > -3x - 24$
 $+24$
 $168 > -3x$
 $-\frac{3}{3}$
 $-56 < x$ or $x > -56$

$-18 \leq 7x + 10 - 3$
 $-18 \leq 4x + 10$
 $-\frac{28}{4} \leq \frac{4x}{4}$
 $-7 \leq x$ or $x \geq -7$

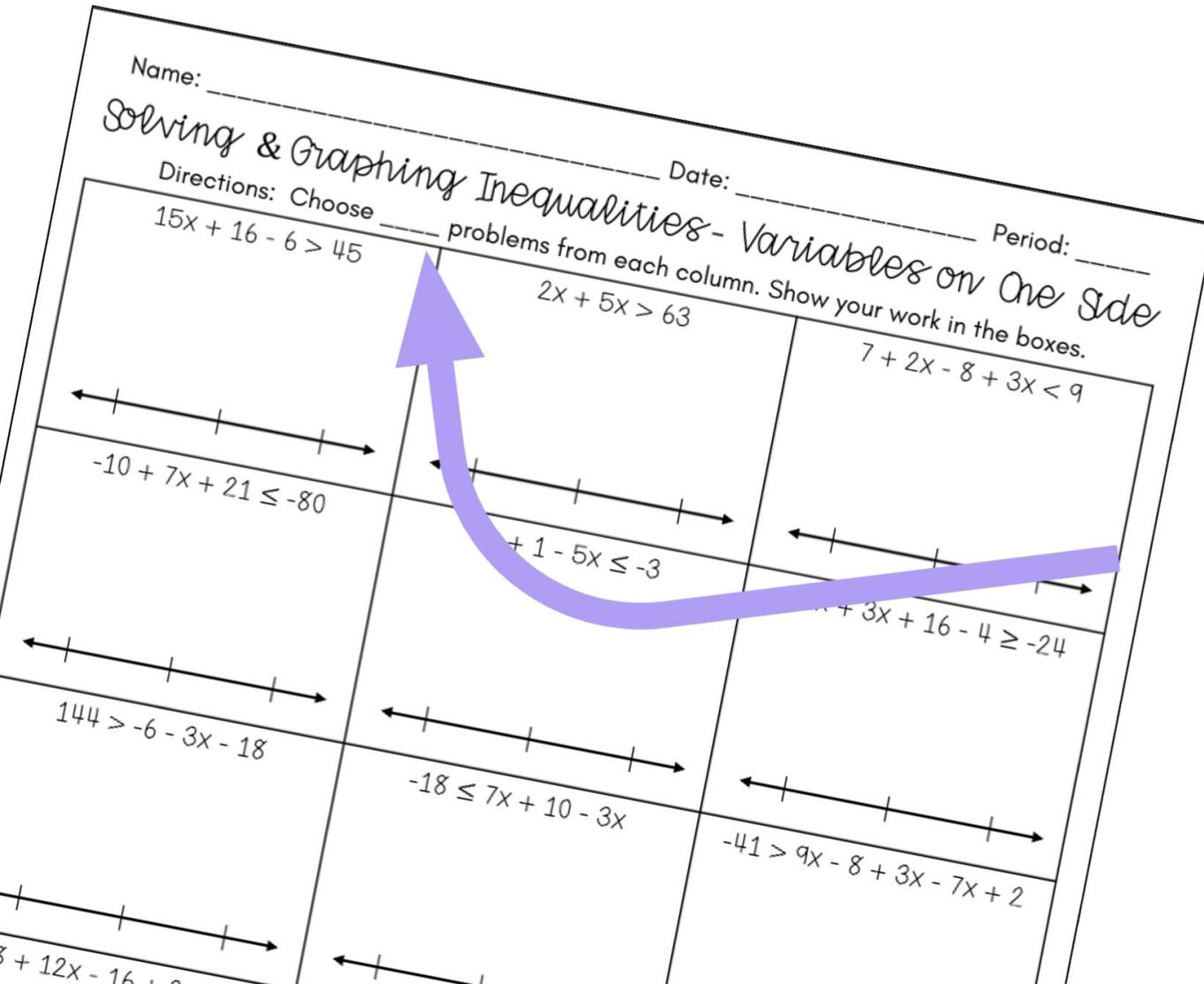
$-8 + 12x - 16 + 2 < 14$
 $12x - 22 < 14$
 $+22$
 $12x < 36$
 $\frac{12x}{12} < \frac{36}{12}$
 $x < 3$

$27 > -8x + x - 1$
 $27 > -7x - 1$
 $+1$
 $28 > -7x$
 $-\frac{28}{-7} > \frac{-7x}{-7}$
 $-4 < x$ or $x > -4$

$66 \leq 18 - 14 - 2x - 6$
 $12x - 22 < 14$
 $+22$
 $12x < 36$
 $\frac{12x}{12} < \frac{36}{12}$
 $x < 3$

$80 \geq 3x - 4x - 5 - 4$
 $80 \geq -5x - 9$
 $+9$
 $89 \geq -5x$
 $-\frac{89}{-5} \geq \frac{-5x}{-5}$
 $-17.8 \geq x$

Multistep Inequalities Variables on One Side Choice Board includes:



- ✓ printable worksheet
- ✓ a detailed answer key
- ✓ 3 columns with 5 questions in each - 15 question total
- ✓ Spot to assign how many problems students need to complete

Multistep Inequalities Variables on One Side Choice Board

standards covered:

CCSS: HSA-REI.B.3

TEKs: A1.5.B

VA SOLs: EO.A.5.a

Name: _____ Date: _____ Period: _____

ANSWER KEY

Solving & Graphing Inequalities - Variables on One Side

Directions: Choose _____ problems from each column. Show your work in the boxes.

$15x + 16 - 6 > 45$ $15x + 10 > 45$ $-10 \quad -10$ $\frac{15x}{15} > \frac{35}{15}$ $x > 2.\overline{33}$ 	$2x + 5x > 63$ $\frac{7x}{7} > \frac{63}{7}$ $x > 9$ 	$7 + 2x - 8 + 3x < 9$ $5x - 1 < 9$ $+1 \quad +1$ $\frac{5x}{5} < \frac{10}{5}$ $x < 2$
$-10 + 7x + 21 \leq -80$ $11 + 7x \leq -80$ $-11 \quad -11$ $\frac{7x}{7} \leq \frac{-91}{7}$ $x \leq -13$ 	$4x + 1 - 5x \leq -3$ $-x + 1 \leq -3$ $-1 \quad -1$ $-\frac{x}{-1} \leq \frac{-4}{-1}$ $x \geq 4$ 	$-12x + 3x + 16 - 4 \geq -24$ $-9x + 12 \geq -24$ $-12 \geq -24$ $\frac{9x}{9} \geq \frac{-36}{9}$ $x \geq -4$
$144 > -6 - 3x - 18$ $144 > -3x - 24$ $+24 \quad +24$ $\frac{168}{-3} > \frac{-3x}{-3}$ $-56 < x$ or $x > -56$ 	$-18 \leq 7x + 10 - 3x$ $-18 \leq 4x + 10$ $-10 \quad -10$ $\frac{-28}{4} \leq \frac{4x}{4}$ $-7 \leq x$ 	$-41 > 9x - 8 + 3x - 7x + 2$ $-41 > -x - 6$ $-6 \quad +6$ $\frac{-47}{-1} > \frac{-x}{-1}$

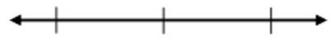
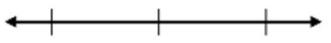
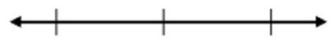
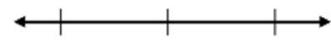
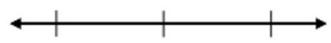
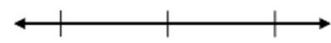
how the choice board resource works

Differentiate the choice board worksheet by reducing the number of problems assigned to show mastery.

Name: _____ Date: _____ Period: _____

Solving & Graphing Inequalities - Variables on One Side

Directions: Choose _____ problems from each column. Show your work in the boxes.

$15x + 16 - 6 > 45$	$2x + 5x > 63$	$7 + 2x - 8 + 3x < 9$
		
$-10 + 7x + 21 \leq -80$	$4x + 1 - 5x \leq -3$	$-12x + 3x + 16 - 4 \geq -24$
		
$144 > -6 - 3x - 18$	$-18 \leq 7x + 10 - 3x$	$-41 > 9x - 8 + 3x - 7x + 2$
		
$-8 + 12x - 16 + 2 < 14$	$27 > -8x + x - 1$	$32 \leq -15x - 8 + 8x + 24 - x$
		

Assign students the number of problems they need to complete from each column.

Students can complete the any problems they want to in each column and in any order.

how to use this resource

This is a great individual practice activity to use when reviewing how to solve & graph multistep inequalities with variables on one side by combining like terms.

My favorite ways to use this choice board is for homework and math practice stations.

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

Name: _____ Date: _____ Period: _____

Solving & Graphing Inequalities- Variables on One Side

Directions: Choose _____ problems from each column. Show your work in the boxes.

$15x + 16 - 6 > 45$ $15x + 10 > 45$ $-10 \quad -10$ $15x > 35$ $15 \quad 15$ $x > 2.\bar{3}$ 	$2x + 5x > 63$ $7x > 63$ $x > 9$ 	$7 + 2x - 8 + 3x < 9$ $5x - 1 < 9$ $+1 \quad +1$ $5x < 10$ $5 \quad 5$ $x < 2$ 															
$-10 + 7x + 21 \leq -80$ $11 + 7x \leq -80$ $-11 \quad -11$ $7x \leq -91$ $7 \quad 7$ $x \leq -13$ 	<p>Name: _____ Date: _____ Period: _____</p> <h3>Solving & Graphing Inequalities- Variables on One Side</h3> <p>Directions: Choose _____ problems from each column. Show your work in the boxes.</p> <table border="1"> <tbody> <tr> <td> $15x + 16 - 6 > 45$ </td> <td> $2x + 5x > 63$ </td> <td> $7 + 2x - 8 + 3x < 9$ </td> </tr> <tr> <td> $-10 + 7x + 21 \leq -80$ </td> <td> $4x + 1 - 5x \leq -3$ </td> <td> $-12x + 3x + 16 - 4 \geq -24$ </td> </tr> <tr> <td> $144 > -6 - 3x - 18$ $144 > -3x - 24$ $+24 \quad +24$ $168 > -3x$ $-3 \quad -3$ $-56 < x \text{ or } x > -56$ </td> <td> $144 > -6 - 3x - 18$ </td> <td> $-18 \leq 7x + 10 - 3x$ </td> </tr> <tr> <td> $-8 + 12x - 16 + 2 < 14$ $12x - 22 < 14$ $+22 \quad +22$ $12x < 36$ $12 \quad 12$ $x < 3$ </td> <td> $144 > -6 - 3x - 18$ </td> <td> $-41 > 9x - 8 + 3x - 7x + 2$ </td> </tr> <tr> <td> $66 \leq 18 - 14 - 2x - 6$ $66 \leq -2x - 2$ $+2 \quad +2$ $68 \leq -2x$ $-2 \quad -2$ $-34 \geq x \text{ or } x \leq -34$ </td> <td> $144 > -6 - 3x - 18$ </td> <td> $-41 > 9x - 8 + 3x - 7x + 2$ </td> </tr> </tbody> </table>		$15x + 16 - 6 > 45$ 	$2x + 5x > 63$ 	$7 + 2x - 8 + 3x < 9$ 	$-10 + 7x + 21 \leq -80$ 	$4x + 1 - 5x \leq -3$ 	$-12x + 3x + 16 - 4 \geq -24$ 	$144 > -6 - 3x - 18$ $144 > -3x - 24$ $+24 \quad +24$ $168 > -3x$ $-3 \quad -3$ $-56 < x \text{ or } x > -56$ 	$144 > -6 - 3x - 18$ 	$-18 \leq 7x + 10 - 3x$ 	$-8 + 12x - 16 + 2 < 14$ $12x - 22 < 14$ $+22 \quad +22$ $12x < 36$ $12 \quad 12$ $x < 3$ 	$144 > -6 - 3x - 18$ 	$-41 > 9x - 8 + 3x - 7x + 2$ 	$66 \leq 18 - 14 - 2x - 6$ $66 \leq -2x - 2$ $+2 \quad +2$ $68 \leq -2x$ $-2 \quad -2$ $-34 \geq x \text{ or } x \leq -34$ 	$144 > -6 - 3x - 18$ 	$-41 > 9x - 8 + 3x - 7x + 2$
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$66 \leq 18 - 14 - 2x - 6$ $66 \leq -2x - 2$ $+2 \quad +2$ $68 \leq -2x$ $-2 \quad -2$ $-34 \geq x \text{ or } x \leq -34$ 	$144 > -6 - 3x - 18$ 	$-41 > 9x - 8 + 3x - 7x + 2$ 															

You may also enjoy ...

SOLVING INEQUALITIES VARIABLES ON BOTH SIDES Choice Board

Date: _____ Period: _____ Name: _____ **ANSWER KEY** Date: _____

Solving Multistep Inequalities with Variables on Both Sides
Directions: Choose _____ problems from each column. Solve and graph each inequality. Show your work in the boxes.

$-4x > -(6x - 2)$	$-6(x + 1) - 2 > -2$	$-x - 3 \leq -3x + 3x$	$-4x > -(6x - 2)$
$-6(1 + 6x) > -6 + 8x$	$-5(x + 6) + 1 < -25 - 6$	$-2x + 8x \geq 5x + 8$	$-6(1 + 6x) > -6 + 8x$
$-26 - 8x \geq 5(2x + 2)$	$7x + 8(x + 8) \leq 2$	$-8x - 1 - 2x < 16 + 7x$	$-26 - 8x \geq 5(2x + 2)$

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SOLVING INEQUALITIES VARIABLES ONE SIDE Football Task Cards

Name: _____ **ANSWER KEY** Date: _____

SOLVING MULTISTEP INEQUALITIES TASK CARDS
Directions: Solve each inequality and show your work in the boxes.

G $10 \leq \frac{1}{2}(6x - 22)$ $10 \leq 3x - 11$ $+11 \quad +11$ $21 \leq 3x$ $\frac{3}{3}$ $x \geq 7$	H $14 > -2(-x - 3)$ $14 > 2x + 6$ $-6 \quad -6$ $8 > 2x$ $\frac{8}{2}$ $x < 4$	F $-4(3x + 7) \leq -28$
K $-3(2x - 4) + 4x \leq 12$ $0x + 12 + 4x \leq 12$ $-2x + 12 \leq 12$ $-12 \quad -12$ $-2x \leq 0$ $\frac{-2x}{-2}$ $x \geq 0$	L $-10 \leq 6x + 4x - 20$ $-10 \leq 10x - 20$ $+20 \quad +20$ $10 \leq 10x$ $\frac{10}{10}$ $x \geq 1$	B $11 \geq -2x - 10 + 6x$

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Recording Sheet & Answer Key Included

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SOLVING MULTISTEP INEQUALITIES - ONE SIDE Digital & Print Activity Pack

5 Activities

Name: _____ Date: _____

Solving Inequalities Drag & Drop Activity
Directions: Choose _____ problems from each column. Show your work in the boxes.

$6(x + 3) > 36$	$-2(x + 4) \geq 30$	$-1(x - 2) > -10$
$2(2x + 1) \geq 64$	$5(2x - 3) < 40$	$180 \geq 5(5x + 4)$
$5(3x + 5) \leq 100$	$-4(-3x - 2) > 4$	$3(5x - 3)(8x - 1)$
$-1(x - 8) \leq -17$	$1(1x - 3x) \geq -5$	$18(x - 8) > -$
$-12(2x + 8) > -192$		

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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!

The image shows a collage of algebra worksheets and a digital tablet. The worksheets include:

- Answer Key** for **ADDING & SUBTRACTING RATIONAL EXPRESSIONS** with handwritten solutions like $\frac{2x-8}{x^2-10}$.
- MULTIPLYING & DIVIDING RATIONAL EXPRESSIONS** with handwritten solutions like $\frac{x^2-x+3x-6}{(x-1)(x-2)}$.
- SOLVING SYSTEMS OF EQUATIONS** with handwritten solutions like $y=2+5$, $y=7$, and $(2, 7)$.

The digital tablet displays a self-checking activity titled **Rational Expression Operations - Addition & Subtraction**. The directions are: "Answer each question and type the question number with the matching answer in the answer column to the right." The activity consists of a table with 8 questions and 8 answers, with a path of colored lines connecting the questions to their corresponding answers.

#	Question	Answer	Type the matching question numbers here
1	$\frac{5}{x} + \frac{3}{x+1}$	$\frac{2x+1}{x+2}$	
2	$\frac{2}{x+4} - \frac{x^2}{x^2-16}$	$-\frac{1}{x^2-1}$	
3	$\frac{x+2}{x^2+4x+4} + \frac{2x}{x+2}$	$\frac{2x^2+2x+5}{x^2+x-2}$	
4	$\frac{x}{x-2} + \frac{3}{x-1}$	$-\frac{x^2+2x-8}{x^2-16}$	
5	$\frac{x}{4x+8} - \frac{1}{x^2+2x}$	$\frac{8x+5}{x^2+1}$	
6	$\frac{x+2}{x-1} + \frac{x-1}{x+2}$	$\frac{x^2-3x+7}{x^2-4}$	
7	$\frac{2x+1}{x^2-4} + \frac{x-3}{x+2}$	$\frac{x^2+2x-6}{x^2-3x+2}$	
8	$\frac{x^2+2x}{x^2-1} - \frac{x+1}{x-1}$	$\frac{x-2}{4x}$	

(c) Malia Rivera, 2024



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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