

Algebra 1
One-Step & Two-Step Inequalities | Algebra 1 | 3-Topic Bundle

3-topic bundle | 288 problems | Four activity formats

01 Addition and Subtraction Inequalities

[View individual product and its full preview](#)

02 Multiplication and Division Inequalities

[View individual product and its full preview](#)

03 Two-Step Inequalities

[View individual product and its full preview](#)

In every topic

Answer Bank Challenge	24 tasks
Grid Rounds	24 tasks
Match & Move	24 cards
Error Analysis & Strategy	24 tasks
Quick Answer Key and Full Worked Solutions	included
Teacher / Parent Use Guide and Terms of Use	included

Product previews

The following preview pages show the cover, all four activity formats, and worked examples for each included resource, in the listed order.

24 PDFs and 3 READMEs; 145 buyer PDF pages across the 3 products.

Preview pages are not included in the buyer page count. Check the list against resources you already own.

This is a fixed collection of the listed products. Purchase includes the existing individual resource files. To open a product's online preview, follow its title link and select View Preview.

Algebra 1
Addition and Subtraction Inequalities

Addition and Subtraction Inequalities | A1-U03-P02

96 problems · Four activity formats

01	Answer Bank Challenge	24 tasks
02	Grid Rounds	24 tasks
03	Match & Move	24 cards
04	Error Analysis & Strategy	24 tasks
05	Quick Answer Key	96 answers
06	Full Worked Solutions	96 solutions
07	Teacher / Parent Use Guide	included
08	Terms of Use & License	included

Topic focus
Across 96 tasks this topic asks for solution inequality with order-preservation justification and solution inequality with order-preservation justification; justified method selection.
8 PDFs and a README; 48 buyer pages.

Algebra 1

Addition and Subtraction Inequalities

Name: _____ Date: _____ Class: _____

Answer each question and record the matching bank letter. Give exact values. Give the whole requested response, including any reasoning the question asks for.

Recover k so that $k < x + 2$ has solution $x > 6$. Bank label: _____	Choose a so $2.4 \geq x + a$ has the upper boundary -0.6. Bank label: _____
Isolate x in $-\frac{7}{4} > x + \frac{1}{2}$ and put x first afterward. Bank label: _____	Solve $x - \frac{11}{12} < \frac{1}{6}$ exactly. Bank label: _____
Solve $-11.2 \leq x + 3.8$. Bank label: _____	Determine the exact solution of $x - \frac{5}{6} < -\frac{1}{3}$. Bank label: _____
Solve $6.4 > x + 1.9$ with an x-first answer. Bank label: _____	Solve $x + \frac{1}{6} < \frac{5}{12}$ exactly. Bank label: _____

Algebra 1

Addition and Subtraction Inequalities

Name: _____ Date: _____ Class: _____

Answer each question and show your reasoning in the workspace. Give exact values rather than decimals unless the question supplies a decimal. Give the whole requested response, including any reasoning the question asks for.

Which of $0.8 > x - 0.6$ and $1.5 > x + 0.4$ permits more values? _____ _____	A student reports $x < 6$ for $x + 2 \leq 8$. Does the endpoint test support that strictness? _____ _____
A solution to $x - \frac{7}{5} < \frac{3}{5}$ is written $x \leq 2$. Test the boundary to judge the equality bar. _____ _____	The proposed solution of $x + 7 < 3$ is $x < -3$. Test the claimed boundary and determine the actual one. _____ _____
Find the signed offset a that makes $x + a \geq -2$ solve to $x \geq 5$. _____ _____	Is there a value of b for which $3 < x - b$ has the real solution $x \geq 7$? _____ _____

Algebra 1

**Addition and
Subtraction Inequalities**

Name: _____ Date: _____ Class: _____

Evaluate the supplied statement or method. Say whether it is correct, repair it if it is not, and verify the result exactly. Not every prompt contains an error.

A student solves $x - 2.5 \geq -1$ as $x \geq -3.5$ by subtracting 2.5 again. Diagnose and correct.

A tenth-scaled graph proposes $x \leq -3$ for $x + 2.25 \leq -0.75$. Audit its endpoint and sides.

A proposed solution to $x - 5 \leq -2$ is $x \geq 3$. Evaluate 2, 3, and 4 to locate the direction error.

A student correctly chooses $a + 3$ translation for $x - 3 > -8$ but reverses the symbol and tests only $x = -6$. Explain why that test is misleading and repair the ray.

Addition and Subtraction Inequalities

Full Worked Solutions - excerpt

Worked example

Problem. Recover k so that $k < x + 2$ has solution $x > 6$.

Answer. $k = 8$.

Explanation and check.

Subtracting 2 gives $k - 2 < x$. The lower boundary $k - 2$ must be 6, so $k = 8$.

Worked example

Problem. Choose a so $2.4 \geq x + a$ has the upper boundary -0.6 .

Answer. $a = 3$.

Explanation and check.

Solving gives $x \leq 2.4 - a$. Requiring $2.4 - a = -0.6$ yields $a = 3$.

Algebra 1
Multiplication and Division Inequalities

Multiplication and Division Inequalities | A1-U03-P03

96 problems · Four activity formats

01	Answer Bank Challenge	24 tasks
02	Grid Rounds	24 tasks
03	Match & Move	24 cards
04	Error Analysis & Strategy	24 tasks
05	Quick Answer Key	96 answers
06	Full Worked Solutions	96 solutions
07	Teacher / Parent Use Guide	included
08	Terms of Use & License	included

Topic focus
Across 96 tasks this topic asks for allowable scale with identifiability explanation, allowable scale with identifiability explanation; justified method selection, first error and repaired reasoning, reversed comparison with justification, reversed comparison with justification; justified method selection and set relationship with decisive witness.
8 PDFs and a README; 47 buyer pages.

Algebra 1

Multiplication and Division Inequalities

Name: _____ Date: _____ Class: _____

Answer each question and record the matching bank letter. Give exact values. Give the whole requested response, including any reasoning the question asks for.

Choose k so $kx > -9$ is equivalent to $x > -6$. _____ Bank label: _____	Determine r so x divided by r at most $\frac{3}{4}$ has boundary $\frac{9}{8}$. _____ Bank label: _____
Determine a so that $ax \leq 18$ produces the target $x \geq -6$. _____ Bank label: _____	Solve $(-\frac{5}{12})x \leq -\frac{35}{18}$ and simplify the exact boundary. _____ Bank label: _____
Determine the x-first solution of $-\frac{5}{2} \geq x$ divided by -3. _____ Bank label: _____	Solve $-7 < -x$ without losing the strict endpoint. _____ Bank label: _____
Solve $-0.06x \geq 0.9$ exactly. _____ Bank label: _____	Find the solution set of $(\frac{13}{6})x \geq 0$. _____ Bank label: _____

Algebra 1

Multiplication and Division Inequalities

Name: _____ Date: _____ Class: _____

Answer each question and show your reasoning in the workspace. Give exact values rather than decimals unless the question supplies a decimal. Give the whole requested response, including any reasoning the question asks for.

Starting from $m < n$, scale by -2 and then by -3. Track each reversal and give the final comparison. _____ _____	Find p so $px > \frac{5}{6}$ yields the target $x < -\frac{10}{3}$. _____ _____
Verify $x \leq 6$ as the solution of $18 \geq 3x$. _____ _____	Solve $ax < 6$ for every possible sign of a, including $a = 0$. _____ _____
Isolate x in $8x \leq 8$. _____ _____	What changes when $-3x \leq 12$ is made strict? _____ _____

Algebra 1

Multiplication and Division Inequalities

Name: _____ Date: _____ Class: _____

Evaluate the supplied statement or method. Say whether it is correct, repair it if it is not, and verify the result exactly. Not every prompt contains an error.

A claimed solution of $-0.25x < 3$ is $x < -0.75$. Diagnose it using the true equality input and simple witnesses.

A student claims multiplying $1 < 3$ by -2 gives $-2 < -6$. Test the claim and repair it.

Use the test values $x = -8$, $x = -9$, and $x = 0$. A proposed answer for $(-\frac{3}{4})x > 6$ is $x > -8$. Use the listed values to audit its direction.

A student starts with $-2x \leq 14$, divides by -2 and reverses to $x \geq -7$, then reverses again because the boundary is negative and writes $x \leq -7$. The work reverses once for a negative divisor and again because the boundary is negative. Locate the first invalid line after the correct step.

Multiplication and Division Inequalities

Full Worked Solutions - excerpt

Worked example

Problem. Choose k so $kx > -9$ is equivalent to $x > -6$.

Answer. The scale is $k = \frac{3}{2}$.

Explanation and check.

The direction is preserved, so $k > 0$. Solving $-\frac{9}{k} = -6$ yields $k = \frac{3}{2}$.

Worked example

Problem. Determine r so x divided by r at most $\frac{3}{4}$ has boundary $\frac{9}{8}$.

Answer. The divisor is $r = \frac{3}{2}$.

Explanation and check.

The unchanged orientation requires $r > 0$; $(\frac{3}{4})r = \frac{9}{8}$ gives $r = \frac{3}{2}$.

Algebra 1
Two-Step Inequalities

Two-Step Inequalities | A1-U03-P04
96 problems · Four activity formats

01	Answer Bank Challenge	24 tasks
02	Grid Rounds	24 tasks
03	Match & Move	24 cards
04	Error Analysis & Strategy	24 tasks
05	Quick Answer Key	96 answers
06	Full Worked Solutions	96 solutions
07	Teacher / Parent Use Guide	included
08	Terms of Use & License	included

Topic focus
Across 96 tasks this topic asks for accepted or repaired set with boundary and witnesses, construction satisfying all constraints with verification, first error and corrected chain, solution after order-safe denominator clearing, solution after value-preserving expansion and solution set with connected inverse steps.
8 PDFs and a README; 50 buyer pages.

Algebra 1

Two-Step Inequalities

Name: _____ Date: _____ Class: _____

Answer each question and record the matching bank letter. Give exact values. A value without its unit is not a complete answer.

Solve $-2\frac{n}{3} + \frac{1}{4} \geq \frac{11}{12}$ for integer n. _____ Bank label: _____	Find the x-values for $-6x - 5 > 13$. _____ Bank label: _____
Solve x divided by negative 5 minus 1 greater than 2. _____ Bank label: _____	Find the solution of $\frac{5-2x}{3} - \frac{x+1}{4} > \frac{1}{6}$. _____ Bank label: _____
Clear denominators in $3\frac{x}{4} - \frac{x}{6} \geq 7$ and solve. _____ Bank label: _____	Solve x divided by negative $\frac{5}{4}$ plus 3 at least -1. _____ Bank label: _____
Expand $-2(3x - 4)$ and solve the inequality. Use the inequality $-2(3x - 4) \geq 20$. _____ Bank label: _____	Expand both groups in $5(2x - 1) - 3(x + 4) \geq -3$ and solve. _____ Bank label: _____

Algebra 1

Two-Step Inequalities

Name: _____ Date: _____ Class: _____

Answer each question and show your reasoning in the workspace. Give exact values rather than decimals unless the question supplies a decimal. A value without its unit is not a complete answer.

Construct an inequality with coefficient 3 and a nonzero negative offset whose solution is $x < 4$. _____ _____	What is the solution set of $5(2-x) + 5x > 10$? _____ _____
Solve $\frac{x-1}{2} + \frac{x+2}{3} < 5$. _____ _____	Construct an inequality using the group $x - 1$ and outer factor 2 that solves to $x > 5$. _____ _____
Verify $x < -5$ for $(-\frac{3}{5})x + 2 > 5$. _____ _____	For integer n, verify $n \geq 3$ as the solution of $\frac{2n-1}{3} > \frac{5}{4}$. _____ _____

Algebra 1

Two-Step Inequalities

Name: _____ Date: _____ Class: _____

Evaluate the supplied statement or method. Say whether it is correct, repair it if it is not, and verify the result exactly. Not every prompt contains an error.

Compare two order-safe routes for $-\frac{x}{3} + \frac{1}{2} \geq \frac{5}{6}$.

Proposed route A: multiply every term by positive 6. Proposed route B: isolate $-\frac{x}{3}$, then multiply by -3.

For integer n , compare both complete routes for $(-\frac{4}{3})n + \frac{1}{2} > \frac{5}{6}$.

Proposed route A: clear by positive 6, solve, then restrict. Proposed route B: isolate the fraction, use a signed reciprocal, then restrict.

Audit $x \leq \frac{5}{2}$ for $\frac{x}{3} + \frac{1}{2} \leq \frac{5}{6}$.

Compare clearing denominators first with isolating $\frac{x}{2}$ first.

Use $\frac{x}{2} + \frac{1}{3} < \frac{7}{3}$. Proposed route A: multiply every term by 6. Proposed route B: subtract $\frac{1}{3}$, then multiply by 2.

Two-Step Inequalities

Full Worked Solutions - excerpt

Worked example

Problem. Solve $-2\frac{n}{3} + \frac{1}{4} \geq \frac{11}{12}$ for integer n .

Answer. The integer set is $n \leq -1$.

Explanation and check.

Multiplying by 12 yields $-8n + 3 \geq 11$, so $-8n \geq 8$ and $n \leq -1$.

Worked example

Problem. Find the x -values for $-6x - 5 > 13$.

Answer. The solution is $x < -3$.

Explanation and check.

Adding 5 produces $-6x > 18$; division by -6 reverses $>$ and yields -3 .