Solving one-step inequalities worksheet answer key pdf

Solving one step inequalities worksheet answer key. Inequalities worksheet answer key. One step inequalities worksheet answer key. Writing and solving one-step inequalities worksheet answer key.

Numbers & Decimals)Inequalities (Intermediate) FREE Students must find and graph solutions to one-step single variable inequalities by isolating the variable. Uses negative numbers, fractions, decimals, and operators.6th through 8th GradesMore Inequality WorksheetsThis is our index page that shows all categories for our inequality worksheets.Sample Images of Our Printable Worksheets Instruct them to follow the simple rules of solving one-step inequalities to a tee, and they will breeze through a variety of tasks, such as identifying solutions in interval notation, identifying graphs of inequalities, and much more. So, we will divide both sides by -3.21/3<-3/3x7 < -x Since this inequality is not simplified, we need to eliminate the variable's negative sign. With multifarious skills, three levels of difficulty, and the inclusion of fraction and decimal coefficients these worksheets are sure to make it to your must-have resources. But not quite. In this case, our reciprocal is 11/4.(4x/11)11/4 < 4 * 11/4x < 11 Intermediate Level(Includes Neg. Soon enough, solving one-step inequalities will feel like child's play! These pdf worksheets are ideal for grade 6, grade 7, grade 8, and high school kids.

The division is normally used to cancel the effect of multiplication.5x/5 < 100/5x < 20Example 1421 < -3xSolutionIn this case, the variable is on the equation's right, so don't bother swapping the equation. We can do this by multiply both sides of the equation by -1 and reverse the sign.2 * -1 > –x * -1-2 < xSolving one-step inequalities by dividing the same number into both sides of the equationFollow the steps in the examples below to understand this.Example 12Solve for x, 2x – 4 < 0SolutionAdd 4 both sides2x – 4 + 4 < 0 + 42x < 4Divide each side by 2, we get2x/2 < 4/2x <4/2So, x < 2 is the answer!Example 13Solve the one-step equation. Therefore, we multiply both sides of the equation by -1 and reverse the sign. Translating Inequality Phrases Worksheets Read the real-world or mathematical problems, identify the terms rendered in the phrases, use apt operators between the terms, and construct one-step inequalities. Grade 6, grade 7, grade 8 and high school students reason about and find solutions that make the inequalities true. Since our goal is to undo the division of the variable, therefore we multiply both sides of the inequality by5(-x/5) > 9 x 5-x > 45Now multiply both sides by -1 and reverse the sign.x < – 45Example 11Solve 2 > –xSolutionYou can notice that this equation is almost solved. (12 Worksheets) Home > Solving Single-step Inequalities – Methods & Examples Example 3Solve the inequality –7 – x < 9Solution–7 – x < 9Add 7 to both sides of the equation.7 – x + 7 < 9 + 7– x < 16 Multiply both sides by –1 and

reverse the sign x > –16Example 4Solve 4 > x – 3SolutionIn this example, the variable is located on the RHS of the equation. To undo the multiplication, we will divide both sides of the equation by the variable's coefficient. Our printable one step inequalities worksheets are your ticket to solving and graphing inequalities in a single step effortlessly. Get off to a flying start with our free one step inequalities worksheets! Picking Out Solutions Hammer home the concept of solving one-step inequalities by plugging in each of the four options in the inequality. Therefore, let's leave on the right side, and to do this, add 3 to both sides of the equation.4+ 3 > x – 3 + 37 > xAnd there, we are done!Solving Single-Step Inequalities by SubtractionFollow the steps in the examples below to understand this.Example 5Solve x + 10 < 16Solutionx + 10 < 16Subtract 7 from both sides of the equation.x + 10 – 10 < 16 – 10x < 6Example 6Solve the inequality 15 > 26 – ySolution15 > 26 – ySubtract 26 from both sides of the equation15 -26 > 26 – 26 -y– 11 > -yMultiply both sides by –1 and reverse the sign11 < yExample 7Solve x + 6 > –3SolutionSubtract both sides by 6.x + 6 – 6 > –3 – 6x > – 9Example 8Solve the one-step equation 13 < y + 8SolutionIn this case, the variable y is also located on the right side of the equation. One-step inequalities involve just one variable and one single operation and are solved in a single step. Get grade 6 students to solve it and figure out which of them satisfy the inequality and circle them.

So, we need to eliminate a negative sign from the variable. We can isolate a variable in an equation regardless of where it is located. That is okay! We will keep to the left side by subtracting both sides by 8.13– 8 < y + 8 – 85 < yExample 9Solve for t in the following equation:t + 18 < 21SolutionTo isolate t on the left side of the equation, we subtract both sides of the equation by 18.t + 18 -18 < 21 – 18t < 3Solving one-step inequalities by multiplying both sides of the equation by a numberFollow the steps in the examples below to understand this.Example 10Solve for x in the following one step equation:x/4 > 8SolutionTo eliminate a fraction, multiply both sides of the equation by the denominator of the fraction.4(x/4) > 8 x 4x > 32And that is it!Example 11Solve the one-step equation -x/5 > 9SolutionIn this inequality, a variable x is divided by 5. -7 > xExample 15Solve −2x < 4SolutionTo solve this one-step equation, we need to divide both sides by −2.Since we're dividing both sides of the equation by a negative number, we will reverse the inequality sign.x > -2Example 16Solve the one-step inequality −2x > −8SolutionDivide both sides of the equation by 2.−2x/2 > −8/2−x > − 4Multiply both sides by -1 and reverse the inequality sign.x < 4Solving one-step inequality by multiplying the reciprocal of the coefficient of a variable to both sides of the equation.Follow the steps in the examples below to understand this.Example 17Solve the one-step equation (4x/11) < 4SolutionMany people are thrown off when presented with one-step inequalities containing fractions.So, how do we solve such kinds of problems?We can solve one-step inequalities bearing fractions by multiplying both sides of the equation by the reciprocal of the fraction. Let children keep our free printable one-step inequalities worksheets front and center to develop a flair for solving inequalities in a single step. Since the variable's coefficient is not equal to 1, this means we need to do an opposite operation to remove 3 from -x.

5x < 100.SolutionIn this example, a variable x is being multiplied by a number.