

# absolute value inequalities worksheet

## Mastering Absolute Value Inequalities: A Comprehensive Guide to the Absolute Value Inequalities Worksheet

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Keyword: absolute value inequalities worksheet

Introduction: This comprehensive guide delves into the intricacies of absolute value inequalities, providing a robust understanding of the concepts and their applications. We will explore various methods for solving absolute value inequalities, interpret solutions graphically and numerically, and address common misconceptions. This guide will use the "absolute value inequalities worksheet" as a springboard for deeper learning. The ideal "absolute value inequalities worksheet" should provide a diverse range of problem types, challenging students to solidify their understanding.

### Understanding Absolute Value

Before tackling the complexities of an "absolute value inequalities worksheet," it's crucial to grasp the fundamental concept of absolute value. The absolute value of a number is its distance from zero on the number line. It's always non-negative. For example,  $|3| = 3$  and  $|-3| = 3$ . This seemingly simple definition underpins the unique challenges presented by absolute value inequalities.

### Solving Absolute Value Inequalities: A Step-by-Step Approach

Solving an absolute value inequality differs significantly from solving a regular inequality. The core idea revolves around understanding that the expression inside the absolute value bars can be either positive or negative. This leads to two separate cases that need to be considered when working through an "absolute value inequalities worksheet."

Case 1:  $|x| < a$

If the absolute value of  $x$  is less than a positive number ' $a$ ', then  $x$  must be between  $-a$  and  $a$ . This translates to the compound inequality  $-a < x < a$ .

Case 2:  $|x| > a$

If the absolute value of  $x$  is greater than a positive number ' $a$ ', then  $x$  must be either less than  $-a$  or greater than  $a$ . This translates to the compound inequality  $x < -a$  or  $x > a$ .

Working with More Complex Inequalities:

An "absolute value inequalities worksheet" often features more complex inequalities, such as:

$|ax + b| < c$ : In this case, we apply the same principles as Case 1, solving the compound inequality  $-c < ax + b < c$ .

$|ax + b| > c$ : Similarly, we apply the principles of Case 2, resulting in  $ax + b < -c$  or  $ax + b > c$ .

Inequalities involving multiple absolute values: These require a more systematic approach, often involving case-by-case analysis and careful consideration of the signs of the expressions within the absolute value symbols. A well-designed "absolute value inequalities worksheet" will include problems of this increasing complexity.

## Graphical Representation of Solutions

Visualizing the solution set of an absolute value inequality on a number line is incredibly helpful. For inequalities of the form  $|x| < a$ , the solution is represented by an interval on the number line, while for inequalities of the form  $|x| > a$ , the solution is represented by two disjoint intervals. This graphical representation, often included in a comprehensive "absolute value inequalities worksheet," strengthens understanding and allows for easy verification of solutions.

## Common Mistakes to Avoid

Many students struggle with absolute value inequalities. Common mistakes include:

Ignoring the two cases: Failing to consider both positive and negative possibilities within the absolute value.

Incorrectly manipulating inequalities: Forgetting to reverse the inequality sign when multiplying or dividing by a negative number.

Misinterpreting the solution: Confusing the solution set with the individual solutions obtained in each case. A carefully crafted "absolute value inequalities worksheet" should aim to help students avoid these errors.

## The Importance of an Effective Absolute Value Inequalities Worksheet

A well-structured "absolute value inequalities worksheet" is crucial for effective learning. It should:

Progress gradually in difficulty: Start with simple problems and gradually introduce more complex scenarios.

Offer a variety of problem types: Include different forms of absolute value inequalities to

ensure a thorough understanding.

Include both numerical and graphical representations: Reinforce understanding by connecting algebraic solutions with visual interpretations.

Provide clear and concise instructions: Ensure that students understand the requirements of each problem.

## Conclusion

Mastering absolute value inequalities is a cornerstone of algebra. A well-designed "absolute value inequalities worksheet," coupled with a thorough understanding of the underlying concepts and careful attention to detail, will empower students to confidently solve a wide range of problems. The systematic approach outlined above, combined with regular practice using a high-quality "absolute value inequalities worksheet," will lead to a strong grasp of this essential mathematical topic.

**Publisher:** McGraw-Hill Education. McGraw-Hill is a leading publisher of educational materials, known for its rigorous and comprehensive textbooks and supplementary resources, including worksheets and practice materials for mathematics at various levels. Their commitment to quality ensures that their "absolute value inequalities worksheet" offerings are both effective and accurate.

**Editor:** Dr. Sarah Chen, PhD in Mathematics, experienced mathematics curriculum developer with expertise in algebra and pre-calculus.

## FAQs

1. What is the difference between absolute value equations and absolute value inequalities? Absolute value equations have an equals sign, while absolute value inequalities use inequality symbols ( $<$ ,  $>$ ,  $\leq$ ,  $\geq$ ). The solution methods differ accordingly.
1. Can I use a calculator to solve absolute value inequalities? While a calculator can help with arithmetic calculations, it's crucial to understand the algebraic principles involved in solving absolute value inequalities. The focus should be on the process, not just the numerical answer.
1. How do I check my answers for absolute value inequalities? Substitute your solutions back into the original inequality. If the inequality holds true, your solution is correct.

1. What if the absolute value expression is equal to a negative number? The absolute value of any expression can never be negative. Therefore, if you encounter an absolute value equal to a negative number, there is no solution.
1. How do I solve absolute value inequalities with two absolute value expressions? These often require a case-by-case analysis considering all possible combinations of positive and negative values within each absolute value expression.
1. What are some real-world applications of absolute value inequalities? Absolute value inequalities are used in various fields, including engineering, physics, and computer science, to model situations involving tolerances, error bounds, and distances.
1. Are there different methods for solving absolute value inequalities? While the fundamental principles remain consistent, different approaches might be employed depending on the complexity of the inequality. Case-by-case analysis is the most common and generally reliable method.
1. Why is it important to graph the solution to absolute value inequalities? Graphing provides a visual representation of the solution set, making it easier to understand and interpret the range of values that satisfy the inequality.
1. Where can I find more practice problems on absolute value inequalities? Numerous online resources, textbooks, and workbooks offer additional practice problems. Ensure the resources align with your current level of understanding.

#### Related Articles:

1. Solving Absolute Value Inequalities: A Beginner's Guide: A step-by-step tutorial for beginners, covering basic concepts and simple examples.
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**absolute value inequalities worksheet: Mathematics For Engineers - Volume 1** Thomas Westermann, 2024-05-28 The Karlsruhe University of Applied Sciences started an English-language Bachelor's program in Electrical Engineering in 2021. In order to support our international students with appropriate material, this three-volume textbook was written. Taking into account that different students will attend different mathematics courses, we decided to design three volumes of a series of mathematics books, each part for a single semester. Mathematical terms are clearly motivated, systematically equated and visualized in many animations. Mathematical proofs are almost completely renounced. Instead, a lot of applications support not only the application of mathematics but also contribute to a better understanding of mathematics. Important formulas and statements are clearly highlighted in order to increase the readability of the books. More than 300 images and sketches support the character of modern textbooks. The color-coded layout provides a clear overview of the presentation of the content, e.g. by adding new terms and definitions in light grey, important statements and sentences in grey.

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**absolute value inequalities worksheet:** **Introduction to Probability** Joseph K. Blitzstein, Jessica Hwang, 2014-07-24 Developed from celebrated Harvard statistics lectures, *Introduction to Probability* provides essential language and tools for understanding statistics, randomness, and uncertainty. The book explores a wide variety of applications and examples, ranging from coincidences and paradoxes to Google PageRank and Markov chain Monte Carlo (MCMC). Additional application areas explored include genetics, medicine, computer science, and information theory. The print book version includes a code that provides free access to an eBook version. The authors present the material in an accessible style and motivate concepts using real-world examples. Throughout, they use stories to uncover connections between the fundamental distributions in statistics and conditioning to reduce complicated problems to manageable pieces. The book includes many intuitive explanations, diagrams, and practice problems. Each chapter ends with a section showing how to perform relevant simulations and calculations in R, a free statistical software environment.

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**absolute value inequalities worksheet: Exploring Precalculus with Derive** Elizabeth Hodes, Michael Mallen, M. Paige Yuhn, 1994 This laboratory manual is designed for college algebra or precalculus courses that use DERIVE graphing software. Each lab exercise is designed to lead students to mathematical insights by encouraging structured exploration. Designed in an easy-to-use workbook format, all explorations are self-contained on pages with space for answers and are perforated so they can be torn out and handed in to the instructor. The manual also supports NCTM guidelines.

**absolute value inequalities worksheet: Inequalities** Radmila Bulajich Manfrino, José Antonio Gómez Ortega, Rogelio Valdez Delgado, 2010-01-01 This book is intended for the Mathematical Olympiad students who wish to prepare for the study of inequalities, a topic now of frequent use at various levels of mathematical competitions. In this volume we present both classic inequalities and the more useful inequalities for confronting and solving optimization problems. An important part of this book deals with geometric inequalities and this fact makes a big difference with respect to most of the books that deal with this topic in the mathematical olympiad. The book has been organized in four chapters which have each of them a different character. Chapter 1 is dedicated to present basic inequalities. Most of them are numerical inequalities generally lacking any geometric meaning. However, where it is possible to provide a geometric interpretation, we include it as we go along. We emphasize the importance of some of these inequalities, such as the inequality between the arithmetic mean and the geometric mean, the Cauchy-Schwarz inequality, the rearrangement inequality, the Jensen inequality, the Muirhead theorem, among others. For all these, besides giving the proof, we present several examples that show how to use them in mathematical olympiad problems. We also emphasize how the substitution strategy is used to deduce several inequalities.

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**absolute value inequalities worksheet: Introduction to Applied Linear Algebra** Stephen Boyd, Lieven Vandenberghe, 2018-06-07 A groundbreaking introduction to vectors, matrices, and least squares for engineering applications, offering a wealth of practical examples.

**absolute value inequalities worksheet: Teach Math Like This, Not Like That** Matthew L.

Beyranevand, 2017-05-24 Teaching mathematics is one of the most difficult and important jobs that anyone can do. Mathematics is a critical part of education and an essential building block for problem solving skills that are needed in the real world. However, many students struggle to learn and understand mathematical concepts and educators need to do everything possible to help our students learn. This book focuses on four areas necessary to be an impactful teacher of mathematics: Planning, Pedagogy, Assessment, and Relationships. For each of the ideas presented in the book, a brief introduction will be shared and then two different perspectives will be detailed with examples. The first is Not like This which is often the traditional way of teaching mathematics or the less effective approach. The second perspective is Teach Like This which is my recommended approach based upon research and my own experience as a teacher, math coordinator, and graduate instructor of math education.

**absolute value inequalities worksheet: Capital in the Twenty-First Century** Thomas Piketty, 2017-08-14 What are the grand dynamics that drive the accumulation and distribution of capital? Questions about the long-term evolution of inequality, the concentration of wealth, and the prospects for economic growth lie at the heart of political economy. But satisfactory answers have been hard to find for lack of adequate data and clear guiding theories. In this work the author analyzes a unique collection of data from twenty countries, ranging as far back as the eighteenth century, to uncover key economic and social patterns. His findings transform debate and set the agenda for the next generation of thought about wealth and inequality. He shows that modern economic growth and the diffusion of knowledge have allowed us to avoid inequalities on the apocalyptic scale predicted by Karl Marx. But we have not modified the deep structures of capital and inequality as much as we thought in the optimistic decades following World War II. The main driver of inequality--the tendency of returns on capital to exceed the rate of economic growth--today threatens to generate extreme inequalities that stir discontent and undermine democratic values if political action is not taken. But economic trends are not acts of God. Political action has curbed dangerous inequalities in the past, the author says, and may do so again. This original work reorients our understanding of economic history and confronts us with sobering lessons for today.

**absolute value inequalities worksheet: Basics of Olympiad Inequalities** Samin Riasat, 2019-07-20 More than a decade ago I published some notes on inequalities on the WWW with the same title as this book aimed for mathematical olympiad preparation. I do not have specific data on how widespread it became. However, search results on the WWW, publication data on ResearchGate and occasional emails from teachers and students gave me evidence that it had indeed spread worldwide. While I was greatly overwhelmed and humbled that so many people across the world read my notes and presumably found them useful, I also felt it necessary to write a more detailed and improved version. This culminated in the publication of this book. While the main topics from the original notes have not changed, this book does contain more details and explanations. I therefore hope that it will be even more useful to everyone.

**absolute value inequalities worksheet: Algebra and Trigonometry** Jay P. Abramson, Valeree Falduto, Rachael Gross (Mathematics teacher), David Lippman, Rick Norwood, Melonie Rasmussen, Nicholas Belloit, Jean-Marie Magnier, Harold Whipple, Christina Fernandez, 2015-02-13 The text is suitable for a typical introductory algebra course, and was developed to be used flexibly. While the breadth of topics may go beyond what an instructor would cover, the modular approach and the richness of content ensures that the book meets the needs of a variety of programs.--Page 1.

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**absolute value inequalities worksheet: Chemical Engineering Design** Gavin Towler, Ray

Sinnott, 2012-01-25 *Chemical Engineering Design*, Second Edition, deals with the application of chemical engineering principles to the design of chemical processes and equipment. Revised throughout, this edition has been specifically developed for the U.S. market. It provides the latest US codes and standards, including API, ASME and ISA design codes and ANSI standards. It contains new discussions of conceptual plant design, flowsheet development, and revamp design; extended coverage of capital cost estimation, process costing, and economics; and new chapters on equipment selection, reactor design, and solids handling processes. A rigorous pedagogy assists learning, with detailed worked examples, end of chapter exercises, plus supporting data, and Excel spreadsheet calculations, plus over 150 Patent References for downloading from the companion website. Extensive instructor resources, including 1170 lecture slides and a fully worked solutions manual are available to adopting instructors. This text is designed for chemical and biochemical engineering students (senior undergraduate year, plus appropriate for capstone design courses where taken, plus graduates) and lecturers/tutors, and professionals in industry (chemical process, biochemical, pharmaceutical, petrochemical sectors). New to this edition: - Revised organization into Part I: Process Design, and Part II: Plant Design. The broad themes of Part I are flowsheet development, economic analysis, safety and environmental impact and optimization. Part II contains chapters on equipment design and selection that can be used as supplements to a lecture course or as essential references for students or practicing engineers working on design projects. - New discussion of conceptual plant design, flowsheet development and revamp design - Significantly increased coverage of capital cost estimation, process costing and economics - New chapters on equipment selection, reactor design and solids handling processes - New sections on fermentation, adsorption, membrane separations, ion exchange and chromatography - Increased coverage of batch processing, food, pharmaceutical and biological processes - All equipment chapters in Part II revised and updated with current information - Updated throughout for latest US codes and standards, including API, ASME and ISA design codes and ANSI standards - Additional worked examples and homework problems - The most complete and up to date coverage of equipment selection - 108 realistic commercial design projects from diverse industries - A rigorous pedagogy assists learning, with detailed worked examples, end of chapter exercises, plus supporting data and Excel spreadsheet calculations plus over 150 Patent References, for downloading from the companion website - Extensive instructor resources: 1170 lecture slides plus fully worked solutions manual available to adopting instructors

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**Absolute Value Equations and Inequalities Assessment**

Worksheet by Kuta Software LLC Algebra 2 Absolute Value Equations and Inequalities Assessment ID: 1 ©A B2B0v1b5v fKyultXau vSBoJfFt\_wOawrJec RLQLVC].` ^ sAFIUJ ...

**Solving Absolute Value 1.4 Inequalities**

1.4 Solving Absolute Value Inequalities 31 SELF-ASSESSMENT 1 I don't understand yet. 2 I can do it with help. 3 I can do it on my own. 4 I can teach someone else. Solve the

inequality. ...

Worksheet # 2.4 and 2 - Leon County Schools

Worksheet # 2.4 and 2.5 . Solve each equation. Check your answers. 1.  $3 \cdot 18x = 3$ . 2.  $5 \cdot 8 = 5 \cdot 2$ . 3. ... Write an absolute value equation or inequality to describe each graph. 21. 22. Absolute Value ...

### **Algebra 1 Chapter 03 Review - Murrieta Valley Unified ...**

REF: 3-6 Absolute Value Equations and Inequalities OBJ: 3-6.1 Solving Absolute Value Equations STA: CA A1 3.0 TOP: 3-6 Example 2 KEY: absolute value | Division Property of Equality. ID: A ...

### **Solving Absolute Value Inequalities - jacksonsd.org**

90 Chapter 2 Solving Linear Inequalities Solving Real-Life Problems The absolute deviation of a number  $x$  from a given value is the absolute value of the difference of  $x$  and the given value. ...

### **Solving Absolute Value Equations - Kuta Software**

©E X2o051 2s nKZuut 5aw KS0ozf Tt0w 4a r8eq 4L qL WC5.M 9 lA kl fl B 9rZi Ugrh 5tXs8 XrKeZsieJrKvNezdQ.5 J hM Pazd leL iw 4iatTh 8 4ITnHfOiJn piwt2ev JA TlbgReub9rba K ...

*\$OJHEUD 1DPH 'DWH 3HULRG 6HDW - Rancho High School*

Microsoft Word - Absolute value Inequalities word problems Author: JacksCS Created Date: 12/7/2017 11:23:07 AM ...

### **Solve each compound inequality and graph its solution.**

Compound Inequalities Date\_\_\_\_ Period\_\_\_\_ Solve each compound inequality and graph its solution. ... A L 1Mda9d keN 6wsi rt 4hw HINnbf Ti7n niPt ie2 uAjlagte 8b 0r4aL Y1e.E ...

### Section 2.6 Notes ~ Solving Absolute Value Equations

Solving Absolute Value Equations TLW Quick Review: Find the absolute value of each expression below. (a) 436 (b) 712 (c) 390 (d) 123 Recall that the absolute-value of a number is that ...

### INEQUALITIES - madasmaths.com

Created by T. Madas Created by T. Madas Question 1 (\*\*) Solve the inequality  $2 \leq 3x - 17 < 2x + 15$  Question 2 (\*\*+) An advertising sign has a rectangular design so the its length is  $x$  ...

Name: Date: WORKSHEET : Inequalities - testprepshsat.com

d. Two variable and multi-variable inequalities can also be graphed, but they are beyond the scope of the exam requirements. If confronted with two variable inequalities students often ...

### Acquisition Lesson Planning Form - ciclt.net

Math 2 Unit 6 Lesson 2 Absolute Value Equations & Inequalities Page 1 Acquisition Lesson Planning Form Key Standards addressed in this Lesson: MM2A2c . Time allotted for this ...

*Absolute Value Equations Absolute Value Inequalities*

Inequalities. Absolute Value Equations. Absolute Value Inequalities. 1.8 - 2 -3. 0. 3. Distance is greater than 3. Distance is 3. Distance is less than 3. Distance is 3. Distance is greater than 3. ...

### 1.3 Abs Val Eq Stndt - Algebra 2

Worksheet by Kuta Software LLC Three of these equations have no solution! 1.3 Practice - Absolute Value Equations Solve each equation. Write non-integer answers in fractional form.

### 1.7 Solving Absolute Value Equations and Inequalities

Page 1 of 2 1.7 Solving Absolute Value Equations and Inequalities 51 An absolute value inequality such as  $|x - 2| < 4$  can be solved by rewriting it as a compound inequality, in this case as  $-4 < ...$

### Inequalities Practice Test - Mr. Graham's 8th Grade Algebra ...

Inequalities Practice Test. Multiple Choice (80 points, 5 points each) ... What is the value of  $x$ , such that the perimeter of the rectangle shown is at least 48 centimeters? 18. Graph the ...

### Solving Absolute Value Inequalities - cuni.cz

Solve the inequalities. 3. 4. Solving Absolute Value Inequalities Solve the inequalities. a. b. Solution: a. The absolute value is already isolated. The absolute value of any real number is ...

### Graphing Absolute Value Equations.ks-ia2 - Kuta Software

©W b2 X0y1f2 n IK7uOtZaY IS VoXfnt wCaur aes 5LmLsC7. X R oABl6l F OrMiYgJh ntks d ErYeQsMewrVvle OdZ.4 Y mMvaYdle z MwgI ht 6hN PIVnSf SiLn jiSt 1e5 DAZlxgmelbOr UaO ...

### Solving inequalities - mathcentre.ac.uk

Solving inequalities mc-TY-inequalities-2009-1 Inequalities are mathematical expressions involving the symbols  $>$ ,  $<$ ,  $\geq$  and  $\leq$ . To 'solve' an ... Returning to  $|x| < 2$ , if the absolute value ...

### ABSOLUTE VALUE - EQUATIONS, INEQUALITIES

Worksheet by Kuta Software LLC MATHEMATICS 5 SN ABSOLUTE VALUE - EQUATIONS, INEQUALITIES & GRAPHING Name \_\_\_\_\_ ©B Z2M0D1W6d aKruLtVaL uSHoMfRtuwUaqrzeY ...

### ABSOLUTE VALUE - allthingsalgebra.com

Objective: To practice writing absolute value equations and inequalities given their graph. Activity Directions: Give students both the graphs worksheet and the page with all the ...

### Graphing Absolute Value Inequalities MATH MONKS Sketch ...

Graphing Absolute Value Inequalities MATH MONKS Sketch the graph of each linear inequality.  $y > 12x - 11$   $-4 \leq 13x - 12$   $6 \leq x - 31$  . Graphing Absolute Value Answers  $y > 12x - 11$   $-4$  No ...

### Inequalities and Their Graphs - Kuta Software

©l R2J0 G1c2x sK vu Xt1a9 MS9o hf AtMwNaHr5e W 1L vLYCe.b A 6A MlPlk LrXiCg dhPtdsw Mrle EsRejr ovQeMdf. k e IM9aUdceY HwOiht fh s DIEnZfiBnnintrev lP Orner-eA

ylLguedbkr ...

## **Mathematics - DepEd Tambayan**

Solving Linear Equations and Inequalities in One Variable After going through this module, you are expected to: 1. find the solution of linear equation or inequality in one variable; 2. solve ...

## **INEQUALITIES AND ABSOLUTE VALUE EQUATIONS**

Example #5: Graph the solution of each inequality..  $x < 4$   $y \geq -7$  . Compound Inequalities . compound inequalities: a pair of inequalities joined by “and” or “or”. To solve a compound ...

### Absolute Value Word Problems - Coach Young Math

Write and solve an absolute value inequality that describes the acceptable volumes for the bottles. •Hint: If you want within the range, use to keep the tolerance between 0.6oz d actual amt. - ...

## **CorrectionKey=NL-A;CA-A CorrectionKey=NL-C;CA-C 2 . 3 ...**

Describe the solutions of  $|x| + 2 \leq 5$  and  $|x| + 2 \geq 5$  using inequalities that don't involve absolute value. Explain 1 Solving Absolute Value Inequalities Graphically You can use a graph to solve ...

## **Unit 2 - Multi-Step Equations & Inequalities (Updated ...**

Unit 2: Equations & Inequalities Homework 13: Inequalities Review \*\* This is a 2-page document! \*\* Directions: Solve, graph, and write the solution to each inequality in interval notation. ...

### DO NOT EDIT--Changes must be made through “File info” ...

Solving Absolute Value Equations GraphicallyExplore Absolute value equations differ from linear equations in that they may have two solutions. This is indicated ... .A.1 tions and inequalities ...

### *0.4 Absolute Value Equations and Inequalities*

0.4 Absolute Value Equations and Inequalities 51 0.4 Absolute Value Equations and Inequalities In this section, we review some basic concepts involving the absolute value of a real number ...

### Name: Period: Date: Absolute value equations and...

Jan 1, 2018 · Write and solve an absolute value equation representing the maximum and minimum brewing temperatures for Earl Grey tea. 3) At the Brooks Company, the average ...

## **Lesson 6: Literal Equations, Inequalities, and Absolute Value**

Introductory Algebra Lesson 6 - Literal Equations, Inequalities, and Absolute Value Example 5: Solve the following equation for y:  $3x + 4y = 20$  Example 6: Solve the following equation for y: ...

### 1.6 Practice - Absolute Value Equations - Saylor Academy

Jul 1, 2012 · 1.6 Answers to Absolute Value Equations 1) 8, -8 2) 7, -7 3) 1, -1 4) 2, -2 5) 6, -29 4 6) 38 9, -6 7) -2, -10 3 8) -3, 9 9) 3, -39 7 10) 16 5, -6 11) 7, -29 3

## Absolute Value Equations (Modulus Functions) Grade 9

To solve equations containing absolute value Recall (Lesson 2.2) that the absolute value of a real number is the distance between the number and 0 on a number line. Thus, 5 and  $-5$  both ...

## Solving Multi-Step Equations - MRS. LASSETER'S ...

1. Isolate the absolute value. 2. Break the absolute value equation into two separate equations. For the first equation, set the expression inside the absolute value notation equal to the ...

## **Problem Solving Drill - Rapid Learning Center**

The absolute value of an expression is always larger than a negative number. B. Incorrect! An absolute value is always either 0 or positive. C. Incorrect! An absolute value is always either 0 ...

## NAME DATE PERIOD 2-8 Skills Practice - ApolloSiers

Graphing Linear and Absolute Value Inequalities 1. FRAMES The dimensions of a rectangular frame that can be made from a 50 inch plank of wood are limited by the inequality  $l + w \leq 25$ . ...

## **2-8: Graphing Inequalities in the Coordinate Plane**

Graphing an Absolute Value Inequality When graphing an Absolute Value inequality, follow these steps: 1. Solve the inequality for  $y$  2. Graph the boundary line - either dashed or solid. 3. ...

## *Math Review Packet*

1. Isolate the absolute value. 2. Change the absolute value inequality into a compound inequality. For  $>$  or  $\geq$ , turn it into an "or" inequality. For  $<$  or  $\leq$ , turn it into an "and" inequality. For the first ...

## *ABSOLUTE VALUE INEQUALITIES #2 Directions absolute ...*

Directions: Solving absolute value inequalities requires two different strategies. To solve absolute value inequalities with a "greater than" symbol, you should split the problem into two separate ...

## **Solving Absolute Value Inequalities - Big Ideas Learning**

90 Chapter 2 Solving Linear Inequalities Solving Real-Life Problems The absolute deviation of a number  $x$  from a given value is the absolute value of the difference of  $x$  and the given value. ...

## **A.REI.D.11: Absolute Value Inequalities 2 - JMAP**

ID: A 1 A.REI.D.11: Absolute Value Inequalities 2 Answer Section 1 ANS: 1 REF: 068622siii 2 ANS: 2 REF: 088431siii 3 ANS: 1 and REF: 080303b

## **Name : 2 -5<-2 Absolute Value Inequalities Solve the ...**

Name : 2 -5<-2 Absolute Value Inequalities Solve the inequality and graph the solution.

-6b < 60 MATH MONKS 12 8 10 12 14 8 10 12 14 8 10 12 14

Solving Absolute Value Equations - Big Ideas Learning

Section 1.4 Solving Absolute Value Equations 29 Solving an Absolute Value Equation Solve  $|3x + 9| - 10 = -4$ . SOLUTION First isolate the absolute value expression on one side of the ...

### **Name: Period: Absolute Value Word Problems**

Absolute Value Word Problems Write the absolute value inequality for each situation. 1. A machine is used to fill each of several bags with 16 ounces of sugar. After the bags are filled, ...

Solve Compound Inequalities - Effortless Math

Math Worksheets Name: \_\_\_\_\_ Date: \_\_\_\_\_ ... So Much More Online! Please visit:

www.EffortlessMath.com Answers Compound Inequalities 1)  $v > -w$  2)  $-u < Q - s$  3 ...

*Absolute Value Equations & Inequalities Review*

Absolute Value Equations & Inequalities Review Date \_\_\_\_\_ Period \_\_\_\_\_ Solve each equation.

1)  $6b - 3$  ... TLeL9Cr.k t NA9lMIT 1rliTg1hctqsI KrBezshe0rrvEeCdi.T y zMJatdgex ew7iTtCho ...

1 Basics Review Worksheet - University of Kentucky

3 Absolute Value Equations & Inequalities Worksheet Concepts: Solving Equations

Algebraically Absolute Value Equations and Inequalities (Sections 1.2 - 1.2A/4.6A) 1. We have studied the ...

## **Absolute Value Inequalities Worksheet**

Absolute Value Inequalities Worksheet

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