Weekly Math Mania

Topic: Solving Inequalities

Date Due: Monday November 7, 2016

YOU MUST: Rate yourself on a scale of 1 to 5 on your understanding of each standard below.

1 represents "I am clueless."
5 represents "I completely understand this concept."

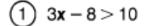
Learning Targets

I can translate from verbal real world situations to symbolic representations (inequalities)
I can solve one step algebraic inequalities involving addition and subtraction
I can solve one step algebraic inequalities involving multiplication and division
I can solve two step inequalities

Family Engagement	Words at Work				
Work through the riddle, "What Do You Call Drilling 4,876 Holes?" with a Family member.	Two-Step Inequality				
Independent Practice	Math in the Real World				
VOLUME 2	Real World Link on page 513. No need to tear the				
Pg 517-518 (1-13 all)	page out, I have provided a copy of the page in this packet.				
You may tear the page out and staple it to this packet.					
Choose either the online activity or the textbook activity.					
Online Activity	Textbook Activity				
Must do the Textbook activity →	Please complete the Power Up Performance Task on pages 525 in your textbook. Tear it out and staple them to the last page in this packet.				

What Do You Call Drilling 4,876 Holes?

Solve each inequality. Find the inequality that describes the solution set and cross out the box containing it. After completing all the exercises, print the letters from the remaining boxes in the spaces at the bottom of the page.



$$30 - 8x < 6$$

$$(4)$$
 $-28 \ge 12x - 4$

$$(5) \frac{x}{4} < 11$$

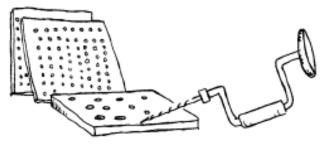
$$6 \frac{x}{5} - 9 > 3$$

$$7 - \frac{x}{2} + 20 \le 4$$

$$8 7 - \frac{x}{10} \ge 12$$

$$9 -18 > \frac{x}{6} - 10$$

$$10 \frac{2}{3}x < 14$$



11)
$$\frac{2}{5}$$
x - 5 \geq 3

$$(12) -\frac{3}{2}x + 9 \le 24$$

$$(13)$$
 $-12 \ge 8 - \frac{4}{3}x$

$$\frac{3}{10}$$
x + 21 < 0

(15)
$$30 - 6x \le 0$$

$$13 - \frac{3}{4}x > 13$$

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НО	DR	AD	IL	AB	LE	AD
x < -70	x < 44	<i>x</i> ≤ −50	x > 6	x < -1	<i>x</i> ≥ −10	x < 0
IG	OR	ВІ	SP	TH	IN	то
x < -48	x ≥ 31	x>3	<i>x</i> ≥ 5	x > 60	x > 9	<i>x</i> ≥ 20
НО	GJ	LE	SL	ОВ	OW	LE
<i>x</i> ≥ 32	x ≤ -4	<i>x</i> ≥ −15	<i>x</i> ≥ 15	x < 19	x < 21	<i>x</i> ≤ −2
						- 11

Real-World Link

Newspapers Kaitlyn is placing an ad in the local newspaper for a pottery class. The cost of placing an ad is shown in the table.

Service	Cost (\$)		
10-day ad with 3 lines	38.00		
each additional line	9.00		

 Complete the equation to find the total cost c of an ad with 4 or more lines. Use x as the variable.



- How much will it cost to place the ad if it is 5 lines long?
- Suppose Kaitlyn can spend only \$50 on the ad. Does she have enough money to place the ad? Circle yes or no.

yes no

If the answer is no, how much more money will Kaitlyn need? Explain.

Definition	
Examples	l