

Weekly Math Mania

Topic: Intro to Solving Inequalities

Date Due: Monday October 31, 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

Family Engagement Work through the riddle, "What Happened When the Crossword Champion Died?" with a Family member.	Words at Work Inequality Define this word on the "Real World" page in this packet
Independent Practice VOLUME 2 Pg 501(1-12 all) Pg 509 (1-14 all) You may tear the page out and staple it to this packet.	Math in the Real World Complete the page in this packet titled "Real World".
Choose either the online activity or the textbook activity.	
Online Activity Must do the Textbook activity →	Textbook Activity Please complete the Inquiry Lab on pages 493-496 in your textbook. Tear it out and staple them to the last page in this packet. You must complete all pages to receive credit.

What Happened When the Crossword Puzzle Champion Died?

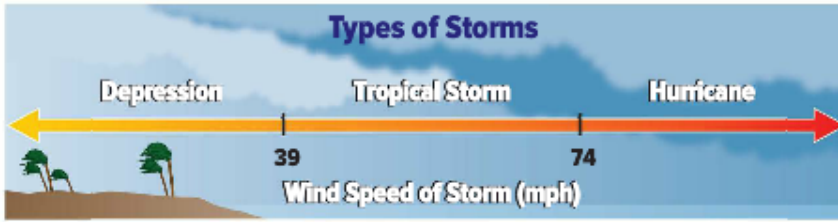
Find the graph of the solution set of each inequality below in the corresponding column of graphs. Notice the letter next to it. Write this letter in each box containing the number of that exercise. Keep working and you will find out about this grave event.

① $x < 2$	①	⑩ $x < 1$	①
② $x \leq 2$	②	⑪ $1 < x$	②
③ $x > 2$	③	⑫ $-3 \leq x$	③
④ $x \geq 2$	④	⑬ $x > -3$	④
⑤ $x \neq 1$	⑤	⑭ $x \neq -1$	⑤
⑥ $x < -1$	⑥	⑮ $0 \geq x$	⑥
⑦ $x > -1$	⑦	⑯ $0 \leq x$	⑦
⑧ $x \leq -1$	⑧	⑰ $0 > x$	⑧
⑨ $x \geq -1$	⑨	⑱ $0 < x$	⑨

1	8	6	11	16	5	14	15	6	17	8	15	10	18	15	7	17	3	2	13	4	13	17	6	15	9	8	1	4	12	14	3	18	18
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Real World

Refer to the diagram below.



- a. A hurricane has winds that are at least 74 miles per hour. Suppose a tropical storm has winds that are 42 miles per hour. Write and solve an inequality to find how much the winds must increase before the storm becomes a hurricane.

Inequality: _____

Solution: _____

- b. A *major storm* has wind speeds that are at least 110 miles per hour. Write and solve an inequality that describes how much greater these wind speeds are than the slowest hurricane.

Inequality: _____

Solution: _____

