

One Variable Inequalities Sort

Supplies: Set of Page 2 game board and pieces for students to use in pairs

One copy of Page 2 for the key

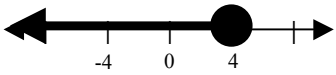
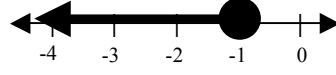
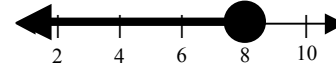
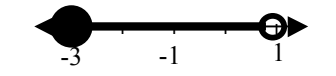
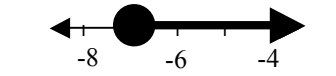
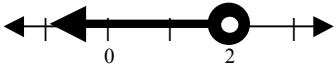
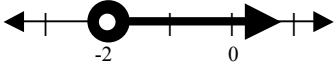
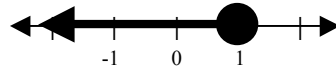
Student record sheet and discussion questions (Pages 3-4), one per student

Cut out the columns of graphs and leave intact. Cut the rest of the sheet into game pieces to match to column of graphs. Binder clip the pieces to the intact column out of order.

Start by having students sort their game pieces into piles of sentences and one variable inequalities. You can continue to sort both piles into greater than and less than.

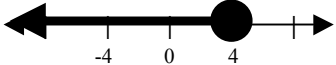
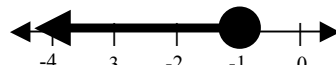
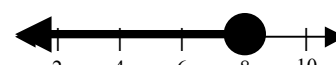
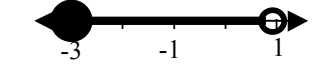
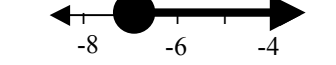
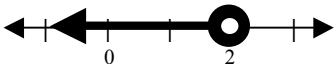
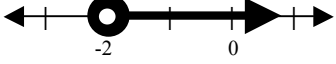
Students will need to solve some of the inequalities before matching their graphs. There is one compound inequality included that students will be able to match using process of elimination.

KEY/PIECES: Graphing One Variable Inequalities Sort (Grade 7 Standards AF 1.0, 4.1)

5 more than a number is at most 9.	$x + 5 \leq 9$	
Twice a number is less than or equal to -2.	$2x \leq -2$	
5 less than a number is no more than 3.	$x - 5 \leq 3$	
A number is at least -3 and less than 1.	$-3 \leq x < 1$	
A number is greater than or equal to -7.	$x \geq -7$	
A number x is less than 2.	$x < 2$	
A number x is greater than -2.	$x > -2$	
A number is at least -4.	$x \geq -4$	
A number is at most 1.	$x \leq 1$	

Name _____

Period _____

Sentence	One Variable Inequality	Graph on the x -axis
		
		
		
		
		
		
		
		
		

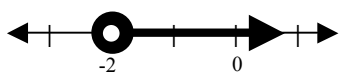
Discussion Questions

- 1) Why does  match with “A number is at least -4”?

- 2) How do you know when to use an open or closed circle?

- 3) Rewrite the sentence “A number is at most 1.” using other words.

- 4) Explain why there are infinite solutions to $x \geq -7$?

- 5) Why doesn't  match $x < 2$?
