

GRAPHING INEQUALITIES

Self – Guided Lesson

TITLE NEW PAGE IN NOTEBOOK "GRAPHING INEQUALITIES"

Copy into notes

Inequality symbols			
$<$	$>$	\leq	\geq
<ul style="list-style-type: none">•less than•fewer than	<ul style="list-style-type: none">•greater than•more than•exceeds	<ul style="list-style-type: none">•less than or equal to•no more than•at most	<ul style="list-style-type: none">•greater than or equal to•no less than•at least

REMEMBER FROM ELEMENTARY SCHOOL?



Remember Allie
Always eats
the **biggest** number.

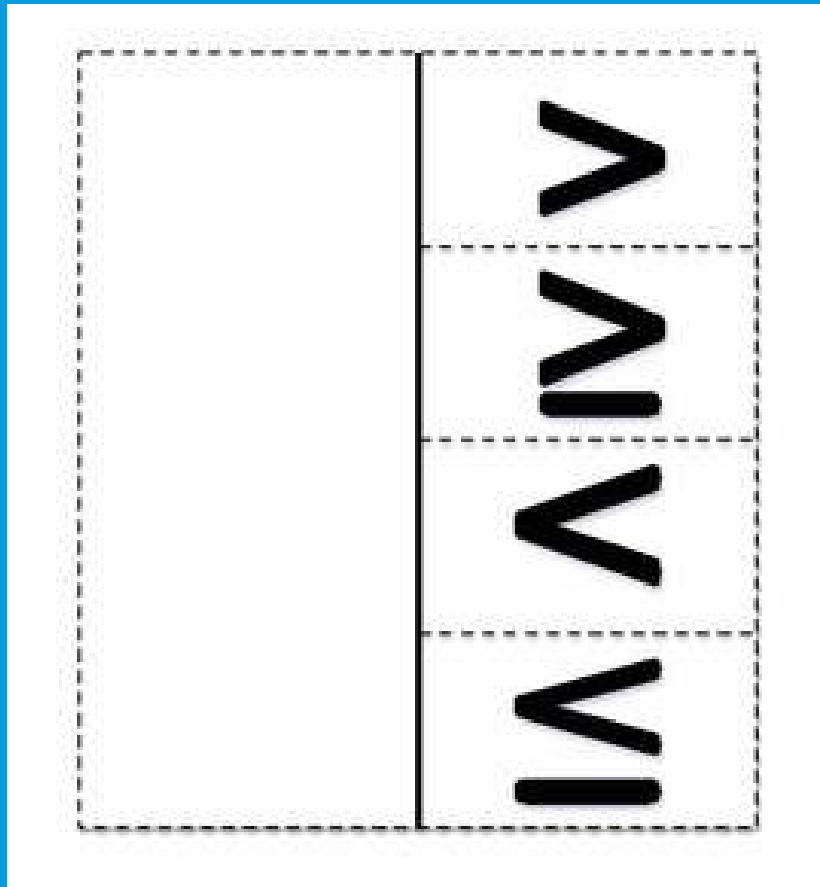
10

6





A cartoon crocodile is shown eating the number 10. The number 6 is positioned below the 10.

FILL IN THE FOLDABLE

Outside of Foldable



Inside of foldable

Greater Than $X > 3$	Open Circle 
Greater Than or Equal To $X \geq 3$	Closed Circle 
Less Than $X < 3$	Open Circle 
Less Than or Equal To $X \leq 3$	Closed Circle 

WATCH THE VIDEO

- [Click Here to Watch Video](#)

COPY THE STEPS FOR GRAPHING INEQUALITIES INTO YOUR NOTEBOOK

Steps for graphing inequalities

1. 1. Check the order. Rearrange if necessary.

$x > 3$ this is OK

$3 < x$ Rearrange so the variable comes first. $x > 3$ (mouth should be eating the same thing.)

2. Draw a circle on for the number on the number line. $<$ $>$ Open \bigcirc , \leq \geq Closed \bullet

3. Shade in the direction the inequality symbol is pointing.

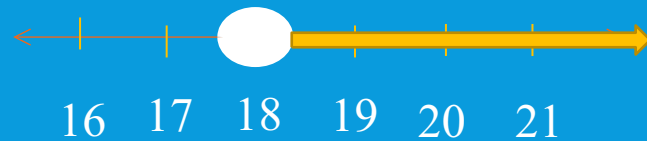
COPY THE EXAMPLE INTO YOUR NOTEBOOK

- $x > 3$
- Read it to yourself "x is greater than 3"
- $>$, so it will be an open circle
- Greater than so shade numbers greater than 3 (in the direction symbol is pointing $>$)



COPY EXAMPLE INTO NOTEBOOK

- $X \geq 18$
- Read it "x is greater than or equal to 18"
- $>$ so closed circle
- X is greater than, so shade in the numbers greater than 18



COPY EXAMPLE INTO NOTEBOOK

$$2 > x$$

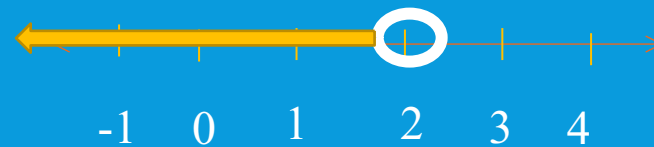
Rewrite it so the variable comes first (Make sure the mouth is eating the same thing, it was eating the 2, so it needs to still be eating the 2)

$$x < 2$$

$<$, so open circle

Read it, $x < 2$, "x is less than 2"

So, shade in numbers less than 2.



COPY EXAMPLE INTO NOTEBOOK

$$20 \geq x$$

Rewrite it with the variable first (Make sure the symbol is eating the same thing, it was eating the 20, so it should still be eating the 20)

$$x \leq 20$$

\leq "or equal to" so closed circle

Read it $x \leq 20$ "x is less than or equal to 20" so shade the numbers less than 20.



DO EVERYTHING LISTED BELOW

1. Follow the link below. Put your name in to receive credit! Watch the videos, do the activities. Some activities will open a new tab, when you finish the activity, close the tab and click next

Assignment [URL:http://www.pbslearningmedia.org/student/code/dog6096/](http://www.pbslearningmedia.org/student/code/dog6096/)

2. IXL 7th grade T.1 through T. 3