

1.  $y \geq \frac{1}{3}x$

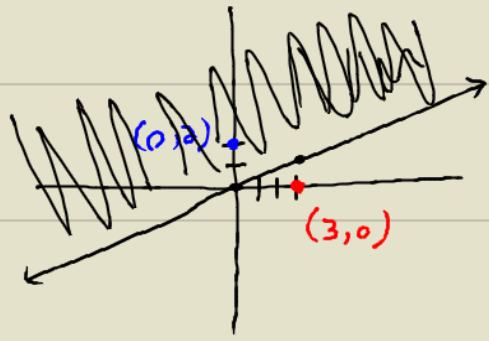
STEP 1: PRETEND THE INEQUALITY SYMBOL IS AN EQUALS AND GRAPH LIKE NORMAL

$<$  or  $>$  : DOTTED LINE  
 $\leq$  or  $\geq$  : SOLID LINE

$y = \frac{1}{3}x$

STEP 2: PICK TESTS ON EACH SIDE, PLUG THEM INTO ORIGINAL INEQUALITY:

TRUE: SHADE THAT SIDE  
 FALSE: DON'T SHADE IT



$(3,0)$   
 $y \geq \frac{1}{3}x$   
 $0 \geq \frac{1}{3}(3)$   
 $0 \geq 1$   
 FALSE

$(0,0)$   
 $y \geq \frac{1}{3}x$   
 $0 \geq \frac{1}{3}(0)$   
 $0 \geq 0$   
 TRUE

1.  $y \geq \frac{1}{3}x$



CALCULATOR TIPS

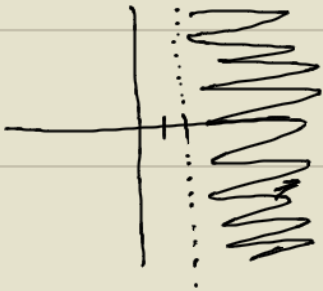
1.  $<$  or  $>$  : DOTTED LINE  
 $\leq$  or  $\geq$  : SOLID LINE

2. ASSUMING  $y$  ON LEFT SIDE

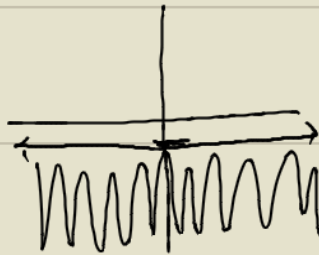
$>$  or  $\geq$

$<$  or  $\leq$

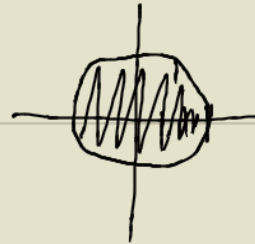
2.  $x > 2$



3.  $y \leq -1$



4.  $x^2 + y^2 \leq 9 \rightarrow r = \sqrt{9} = 3$



5.  $x^2 + y^2 > 25 \rightarrow r = \sqrt{25} = 5$

ex:  $(x-2)^2 + (y+3)^2 > 25$

$h=2$        $k=-3$

C:  $(2, -3)$

