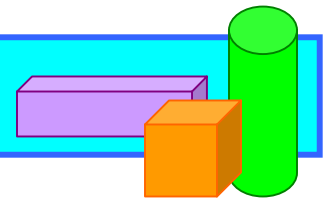


Graph Inequalities



Fill in the blanks.

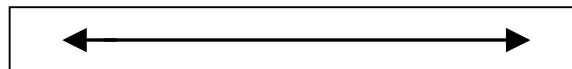
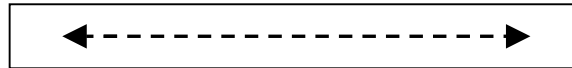
Which 5 symbols express inequality? _____

When graphing an inequality, use a _____ line when the symbol is $<$, \neq , or $>$.

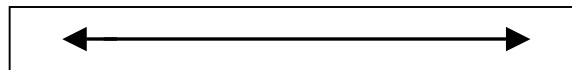
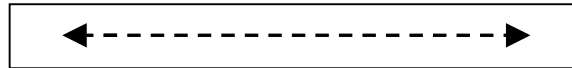
Use a _____ line when the symbol is \leq or \geq .

Circle the correct answer.

Which type of line would you use to graph the inequality $y \geq 5 - 2x$?



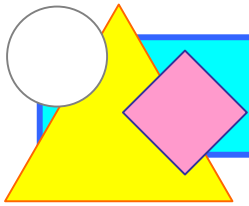
Which type of line would you use to graph the inequality $y < 6x + 1$?



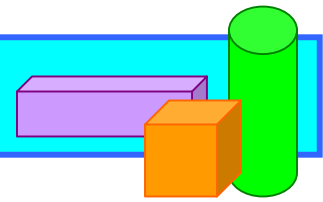
The solution to an inequality includes other points in the coordinate plane that are not shown on the line.

True

False



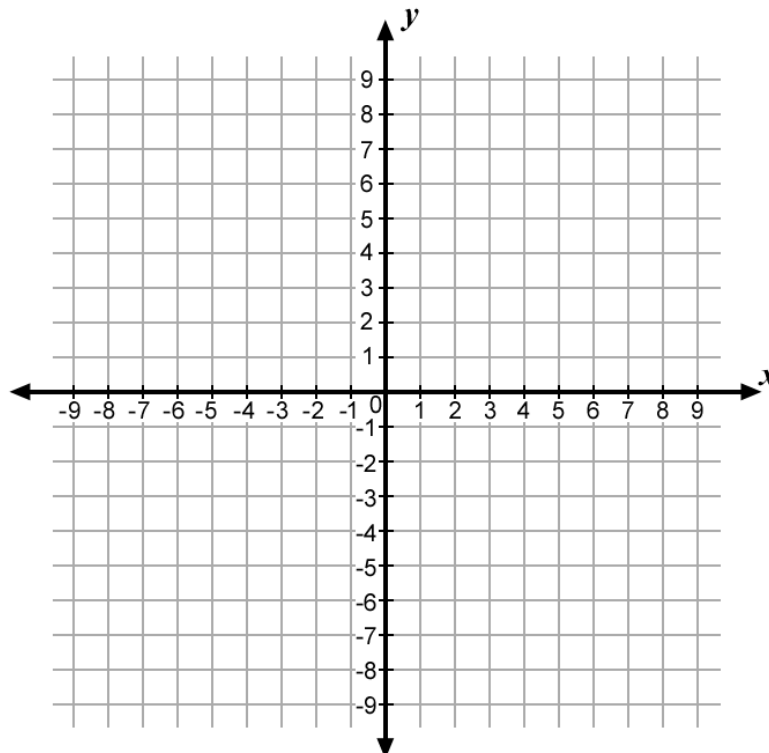
Graph Inequalities

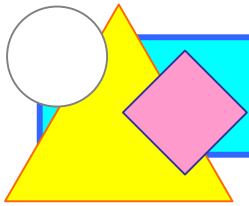


Fill in the y -values and ordered pairs that are missing from the chart below.

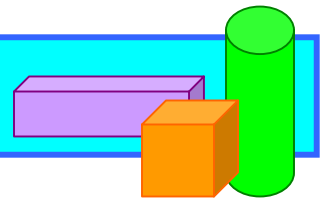
$y < x - 4$		
x-value	y-value	Ordered Pair
2		
4		
-1		

On the coordinate plane below, graph the ordered pairs from the chart above. Depending on the inequality symbol in the equation, decide whether to use a dotted or a solid line to connect the coordinates. Label the line with the inequality, then shade one side of the line.





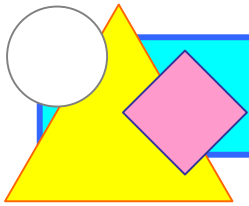
Graph Inequalities



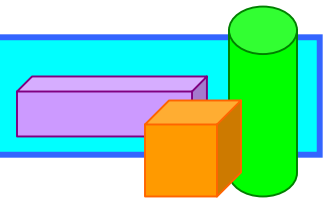
Do the points in the shaded area satisfy the inequality? Test any ordered pair from the shaded area by substituting the x - and y -values in the inequality $y < x - 4$. Show your work.

Does your test point satisfy the inequality? Explain your answer.

Based on your test, what can you say about the shaded area on the coordinate plane? Explain your answer.



Graph Inequalities



First, choose x -values that make the inequality easy to solve for y . Then, fill in the y -values and ordered pairs that are missing from the chart.

$y \geq \frac{1}{2}x + 3$		
x-value	y-value	Ordered Pair
6		
2		
0		

Now, graph the ordered pairs on the coordinate plane below using the correct type of line to connect the coordinates. Then, shade the correct area. Check your work by selecting a test point from the shaded area to see if it satisfies the inequality.

