

Inequalities**LEARNING PLAN #5**

(Chapter 3)

Skill / Understanding:	Review Problems:
<p>One-Variable Inequalities</p> <ul style="list-style-type: none"> <input type="checkbox"/> I can solve one-variable inequalities algebraically. <input type="checkbox"/> I can check my solution by substituting values on all sides of the boundary points. <input type="checkbox"/> I can show the solution to a one-variable inequality on a numberline and know when to use an open circle or closed circle as the boundary point. <input type="checkbox"/> I can show the solution to a one-variable inequality using inequality notation. <input type="checkbox"/> I can use the graph of a two-variable inequality to determine the solution of a one-variable inequality (exemplary). 	<p>3-74, 3-75, 3-82, 3-92, 3-103, 3-111, CL 3-121, 3-81, 3-96, 3-102, 3-112(b), and CL 3-122.</p>
<p>Two-Variable Inequalities</p> <ul style="list-style-type: none"> <input type="checkbox"/> I can graph two-variable inequalities by graphing the boundary curve and shading the solution region. <input type="checkbox"/> I can check the solution by substituting values on all sides of the boundary curves. <input type="checkbox"/> I understand that the solution region to a two variable inequality is a region of the graph in which all of the points make the inequality true. <input type="checkbox"/> I understand when to make my boundary curve solid or dotted. 	
<p>Systems of Inequalities</p> <ul style="list-style-type: none"> <input type="checkbox"/> I can graph a system of two-variable inequalities by graphing the boundary curves and shading the solution region. <input type="checkbox"/> I understand that the solution region to a system of inequalities is the region of the graph in which all of the points make both of the inequalities true. <input type="checkbox"/> I understand when to make my boundary curves solid or dotted. 	

PRACTICE PROBLEMS

1. Solve the inequalities and represent the solution on a number line and using inequality notation.

a. $8 - 7x > 29$

b. $15 + |3 + x| \leq 20$

c. $x^2 - 2x - 15 < 0$

2. Graph the inequality: $(x + 2)^2 + (y - 1)^2 < 16$

3. Graph the system of inequalities below.

$$y \leq 5x - 8$$

$$y > x$$

4. Write an equation to represent the inequality graphed at right.

