## VI. System of Linear Inequalities (p.292):



The solution region to the system of linear inequalities is the intersection (overlapping region) between the two solutions...

$$
\begin{gathered}
\mathrm{a}_{1} \mathrm{x}+\mathrm{b}_{1} y \leq \mathrm{c}_{1} \\
\text { and } \\
\mathrm{a}_{2} \mathrm{x}+\mathrm{b}_{2} y>\mathrm{c}_{2}
\end{gathered}
$$



## VII. Examples (p.294): Exercises\#30,44

## HW: p. 294 / Exercises \#23,25,29,37,43

Exam II: Chapters $\mathbf{3} \& 4$ covered (sections $3.4,3.5 \& 4.5$ omitted) approx. 10-12 problems...
Solve a system of 2 linear equations in 2 variables...
graphing, substitution and/or elimination ...inconsistent case $=$ no solution
...dependent case $=$ infinitely many solutions of the form $\sim(x, m x+b)$ where " $x$ " is any real \#
Solve a system of 3 linear equations in 3 variables... Solve applications (i.e., word problems, by any method)... geometry, break-even, simple interest, uniform motion Solve linear \& absolute value inequalities, absolute value equations, system of linear inequalities Calculator, pencil, eraser, straight-edge needed!

