Systems of Inequalities Skills check (6.1🡪6.3) Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_

[](http://www.google.ca/url?sa=i&rct=j&q=sample+graph+paper&source=images&cd=&cad=rja&docid=fYgw6mvI8nPV2M&tbnid=r8ugDHFRf1kAzM:&ved=0CAUQjRw&url=http://www2.sunysuffolk.edu/pestiej/&ei=DyKAUeSDAqPniwK2_4DoAw&bvm=bv.45921128,d.cGE&psig=AFQjCNG1xDYgtkygnDv-H2vexFR0_vUE_A&ust=1367438213867151)

1. Graph the following inequality. Show all algebraic work.
2. [](http://www.google.ca/url?sa=i&rct=j&q=sample+graph+paper&source=images&cd=&cad=rja&docid=fYgw6mvI8nPV2M&tbnid=r8ugDHFRf1kAzM:&ved=0CAUQjRw&url=http://www2.sunysuffolk.edu/pestiej/&ei=DyKAUeSDAqPniwK2_4DoAw&bvm=bv.45921128,d.cGE&psig=AFQjCNG1xDYgtkygnDv-H2vexFR0_vUE_A&ust=1367438213867151)Graph the following system. Show all algebraic work. Identify two possible solutions



1. Carol is setting up her social networking page:

* She wants no more than 400 friends on her social networking page.
* She also wants to have at least 4 school friends for every rugby friend.

1. Define the variables and write a system of inequalities that models this situation.
2. What are the restrictions on the variables?
3. Graph the solution set and determine 1 possible combination of school friends and rugby friends she could have.

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