**Homework for Inequalities in the Real World**

***For questions #1-5, write an inequality statement using the variable x to represent each real-world situation below. Then, write 3 possible solutions to each inequality.***

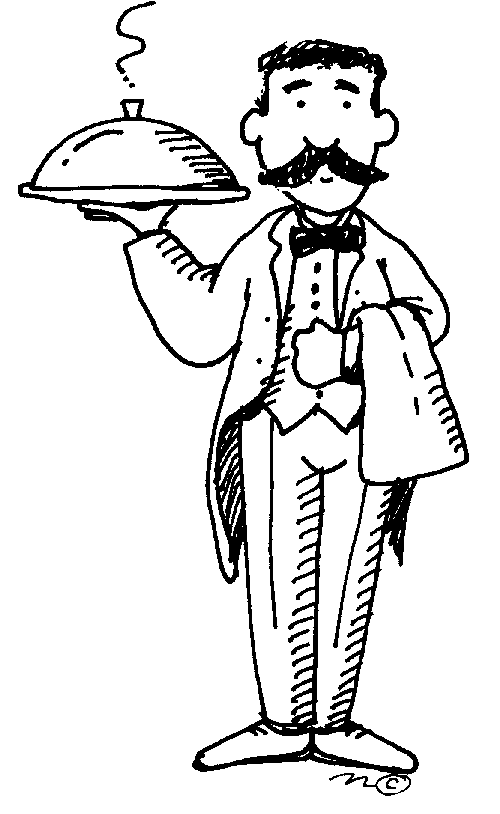
1. Casey sold less than 20 cookies at the bake sale.
2. Timmy needs to put together more than 17 goody bags for his birthday party.
3. You will need at least 5 different colored pencils for Mrs. Young’s art project.



1. To order from the kid’s menu, a child must be less than 12 years old.
2. In order to ride the rollercoaster, Justin must be greater than 60 inches tall.

***For questions #6 and 7, use the information provided to answer each question.***

6) Jose works as a waiter. In order to stay at the restaurant, he must work more than 20 hours a week.

[](http://www.google.com/url?sa=i&rct=j&q=&esrc=s&frm=1&source=images&cd=&cad=rja&docid=GuyGcVKl5TwqBM&tbnid=h1EtbZ3ahYyzaM:&ved=0CAUQjRw&url=http://school.discoveryeducation.com/clipart/clip/waiter.html&ei=QtYIUue4L-m6yAGmkIGwAg&bvm=bv.50500085,d.aWc&psig=AFQjCNFhVZuCgf3XKJeiLdy_BeILmAlFyQ&ust=1376396791299890) a) If Jose works 17 hours, has he worked enough for the week?

b) If Jose works 20 hours, has he worked enough for the week? Why or why not?

c) If Jose makes $12 an hour, how many hours will he need to work to make $300?

7) Leila is training to run a marathon. She must run at least 40 miles each week in order to be ready.

1. Write an inequality to represent how many miles Leila must run each week to train.
2. If Leila plans on running 6 days each week, how many miles will she need to run each day to prepare for the marathon?

8) A set has the following values: { 3, 4, 5}. Which of the values in this set make the inequality below true?

***3x + 2 <14***