

Inequality Word Problems

Complete the problems on this sheet in your notebook.

For each question:

- Define your variables
- Write an inequality to represent the situation
- Solve the inequality to answer the question.

- 1) Elisa won 40 lollipops playing basketball at the school fair. She gave two to every student in her math class. She has at least 7 lollipops left. Solve to find the maximum number of students in her class.
- 2) More than 450 students went on a field trip. Ten buses were filled and 5 more students traveled in a car. Solve the inequality to find the minimum number of people on each bus.
- 3) Bill spent less than \$26 on a magazine and five composition books. The magazine cost \$4. Solve the inequality to find the maximum cost of each composition book.
- 4) Amanda rented a bike from Shawna's Bikes. They charged her \$2 per hour, plus a \$10 fee. Amanda paid less than \$27. Solve the inequality to find the maximum number of hours Amanda rented the bike.
- 5) You need to buy some pencils and an eraser. You can spend no more than \$5. The eraser costs \$1 and the pencils cost \$0.25 each. Solve the inequality to find the maximum number of pencils you can buy.
- 6) Mark's Canoes rents canoes for \$20 plus \$35 per hour. You do not want to spend more than \$150. For how many hours can you afford to rent the canoe?
- 7) For a field trip 18 students rode in cars and the rest filled five buses. How many students were in each bus if no more than 250 students went on the trip?
- 8) Charles is saving \$5 each week. He earns an extra \$15 by mowing his neighbor's lawn. How many weeks will he need to save in order to have at least \$75?
- 9) Allison practices her violin for at least 12 hours per week. She practices for three fourths of an hour each session. If Allison has already practiced 3 hours this week, how many more sessions remain for her to meet or exceed her weekly practice goal?
- 10) A taxi charges a flat rate of \$1.75, plus an additional \$0.65 per mile. If Erica has at most \$10 to spend on the cab ride, how far could she travel?