Algebra 1

Name\_

## One-variable Inequality Word Problems

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Period\_

- 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.
  - a) Write an inequality to represent the situation. Be sure to define your variable.
  - b) Solve the inequality 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.
  - a) Write an inequality to represent the situation. Be sure to define your variable.
  - b) 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.
  - a) Write an inequality to represent the situation. Be sure to define your variable.
  - b) 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.
  - a) Write an inequality to represent the situation. Be sure to define your variable.
  - b) 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.
  - a) Write an inequality to represent the situation. Be sure to define your variable.
  - b) 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?
  - a) Write an inequality to represent the situation. Be sure to define your variable.
  - b) Solve the inequality and answer the question.

- 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?
  - a) Write an inequality to represent the situation. Be sure to define your variable.
  - b) Solve the inequality and answer the question.

- 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?
  - a) Write an inequality to represent the situation. Be sure to define your variable.
  - b) Solve the inequality and answer the question.

## Answers to One-variable Inequality Word Problems

1) 16	2) 45	3) \$4.40	4) 8.5
5) 16	6) 3.7	7) 46	8) 12