

**One-variable Inequality Word Problems**

Period \_\_\_\_\_

© 2014 Kuta Software LLC. All rights reserved.

- 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.
- Write an inequality to represent the situation. Be sure to define your variable.
  - 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?
- Write an inequality to represent the situation. Be sure to define your variable.
  - 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?
- Write an inequality to represent the situation. Be sure to define your variable.
  - 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?
- Write an inequality to represent the situation. Be sure to define your variable.
  - 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