

Writing an inequality for a real-world situation: Worksheet 4.1

Name Date Score

Write an inequality for each of the following real-world situations.

1. Natasha has at least 5 cats. Let c represent the number of cats Natasha has.
2. Ruben walks his dog more than 30 minutes every day. Let t represent the time in minutes that Ruben walks his dog.
3. More than 370 students went on a field trip. Ten buses were filled and 8 more students traveled in a car. Let s represent the number of students in each bus.
4. John spent less than \$28 on a magazine and six composition books. The magazine cost \$5. Let the cost of a composition book be z .
5. Linda rented a bike from Bruno's Bikes. They charged her \$4 per hour, plus a \$15 fee. Linda paid less than \$35. Let h be the number of hours Linda rented the bike.
6. Shawna needs to buy some pencils and an eraser. She can spend no more than \$6. The eraser costs \$1 and the pencils cost \$0.30 each. Let the number of pencils Shawna buys be p .
7. For a field trip 22 students rode in cars and the rest filled six buses. How many students were in each bus if no more than 280 students went on the trip? Let number of students in each bus be x .
8. Phil is saving \$8 each week. He earns an extra \$12 by mowing his neighbor's lawn. How many weeks will he need to save to have at least \$72? Let Phil work for m number of weeks to save the amount.
9. Mojo's Canoes rents canoes for \$25 plus \$40 per hour. You do not want to spend more than \$150. For how many hours can you afford to rent the canoe? Let the number of hours you can rent the canoe be h .
10. Monica won 50 lollipops playing volleyball at the school fair. She gave three to every student in her math class. She has at least 9 lollipops left. Let the number of students in her class be s .



Solutions: Worksheet 4.1

1. $c \geq 5$

2. $t > 30$

3. $10s + 8 > 370$

4. $6z + 5 < 28$

5. $4h + 15 < 35$

6. $0.30p + 1 \leq 6$

7. $22 + 6x \leq 280$

8. $8m + 12 \geq 72$

9. $25 + 40h \leq 150$

10. $50 - 3s \geq 9$

