# Writing an inequality for a real-world situation: Worksheet 4.2

Name ................................. Date ................................. Score .................................

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

1. The width of a rectangle is 43 centimeters. The perimeter is at least 198 centimeters. Let the length of the rectangle be *l*.

2. Pablo walks his dog more than 40 minutes every day. Let *t* represent the time in minutes that Pablo walks his dog.

3. More than 380 students went on a field trip. Ten buses were filled and 10 more students traveled in a car. Let *s* represent the number of students in each bus.

4. Jack spent less than $38 on a magazine and five composition books. The magazine cost $6. Let the cost of a composition book be *z*.

5. Linda rented a bike from Bruno's Bikes. They charged her $5 per hour, plus a $12 fee. Linda paid less than $36. 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 $8. The eraser costs $1 and the pencils cost $0.25 each. Let the number of pencils Shawna buys be *p*.

7. For a field trip 26 students rode in cars and the rest filled six buses. How many students were in each bus if no more than 290 students went on the trip? Let number of students in each bus be *x*.

8. Phil is saving $7 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 $64? Let Phil work for *m* number of weeks to save the amount.

9. Mojo's Canoes rents canoes for $25 plus $45 per hour. You do not want to spend more than $180. 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 45 lollipops playing volleyball at the school fair. She gave two to every student in her math class. She has at least 9 lollipops left. Let the number of students in her class be *s*.

1. $2(l + 43) \geq 198$

2. $t > 40$

3. $10s + 10 > 380$

4. $5z + 6 < 38$

5. $5h + 12 < 36$

6. $0.25p + 1 \leq 8$

7. $26 + 6x \leq 290$

8. $7m + 12 \geq 64$

9. $25 + 45h \leq 180$

10. $45 - 2s \geq 9$