Solving a word problem using a one-step linear inequality: Worksheet 11.2

Name	Date	Score
Solve the following wor	d problems using one-step	linear inequality. Use x to
represent the unknown	quantity.	

- 1. Seven more than a number is less than 18. Find the number.
- 2. Five more than a number is greater than 26. Find the number.
- 3. While training for a marathon, you consume at least 2200 calories a day. For one session of exercise, you consume 400 calories. How many calories do you consume for the rest of the day?
- 4. Eight more than a number is greater than or equal to 21. Find the number.
- 5. Sue has \$33 left for a cab fare home. The cab fare is \$3 per mile. What is the maximum number of miles she will be able to travel in the cab?
- 6. A pilot must log at least 1100 training hours to fly an aircraft. Jim logged 300 hours. How many more hours must he log to qualify?
- 7. Sandra won 44 toffees in a competition. She gives one toffee each of her classmates and has at least 10 toffees left at the end. Find the number of students in her class.
- 8. In 5 years, Nicole will be old enough to vote in an election. The minimum age for voting is at least 18 years. What can you say about how old she is now?
- 9. Brad has a \$27 online gift voucher. He plans to buy as many books as he can. The cost of each book is \$3. How many books can he afford without spending more than his gift voucher amount?
- 10. A teacher charges \$2 for a pencil to student who forgot to bring one to class. Nelson was charged at least \$30, how many times did he forget his pencil?



Solutions: Worksheet 11.2

- 1. x < 11
- 2. x > 21
- 3. $x \ge 1800$ calories
- 4. $x \ge 13$
- 5. $x \le 11$ miles
- 6. $x \ge 800$ hours
- 7. $x \le 34$ students
- 8. $x \ge 13$ years
- 9. $x \le 9$ books
- 10. $x \ge 15$ times