

Name: \_\_\_\_\_

Date: \_\_\_\_\_

## UNIT 2 • REASONING WITH LINEAR EQUATIONS AND INEQUALITIES

### Lesson 1: Creating Linear Equations and Inequalities in One Variable

#### Practice 2.1.2: Creating Linear Inequalities in One Variable

B

For problems 1–3, translate each phrase into an algebraic inequality.

1. An amusement park ride can hold 8 passengers.
2. An auditorium can seat 250 people or fewer.
3. The maximum weight an elevator can hold is 2,400 pounds.

For problems 4–9, read each scenario, write an inequality to model the scenario, and then use the inequality to solve the problem.

4. Jeff is saving to purchase a new basketball that will cost at least \$88. He has already saved \$32. At least how much more does he need to save for the basketball?
5. Suppose you earn \$15 per hour working part time as a carpenter. This month, you want to earn at least \$950. How many hours must you work?
6. Mackenzie earned a score of 79 on her semester biology test. She needs to have a total of at least 160 points from her semester and final tests to receive a B for her grade. What score must Mackenzie earn on her final test to ensure her B?

*continued*

SWB p. 27

Name: \_\_\_\_\_

Date: \_\_\_\_\_

---

## UNIT 2 • REASONING WITH LINEAR EQUATIONS AND INEQUALITIES

### Lesson 1: Creating Linear Equations and Inequalities in One Variable

---

7. Arianna buys computer games from an online store. Each game she orders costs \$22, and shipping for her total order is \$9. Arianna can spend no more than \$75. How many computer games can Arianna buy?
  
8. A recreation center holds a lacrosse game every Saturday morning for young adults. The group agreed that at least 6 players are needed on each team. One team started out with 16 players. After an hour of playing, 2 players from that team started leaving every 7 minutes. For at least how long can they remain playing?
  
9. A radio station has no more than \$25,000 to give away. The station will give away \$1,000 three times a day every day until there is no more than \$4,000 left to award as a grand prize. How many days will the contest run?

For problem 10, create your own context for the given inequality, and then solve the inequality. Be sure to express your solution in terms of the context of the problem.

10.  $3x - 3 > 6$