

Name \_\_\_\_\_

**3-7B Lesson Master****Questions on SPUR Objectives**

See pages 178–179 for objectives.

**SKILLS** Objective B

In 1–9, solve the inequality and check your answer. Show your work.

1.  $5x - 7 < 3$

2.  $11 - 2a < 19$

3.  $\frac{2}{5}(15c + 5) > -28$

4.  $100 \leq 12.6d + 24.4$

5.  $26.8 < 13.4 - 6.7x$

6.  $-5(m - \frac{3}{10}) + \frac{6}{7}(14m + 7) > \frac{1}{2}$

7.  $-\frac{3}{5}k - \frac{4}{3} > \frac{1}{3}$

8.  $2m - 5(m + 2) \geq 8$

9.  $6(n - 1) - 2n \leq 26$

**USES** Objective D

In 10–14, a situation is given.

a. Write an inequality to describe the situation.

b. Solve the inequality and answer the question.

10. A gallon of paint covers up to 400 square feet. Tuck already has 2 gallons of paint to use. What is the least number of gallons Tuck needs to purchase to cover a total area less than 2,800 sq ft?

a. \_\_\_\_\_

b. \_\_\_\_\_

Name \_\_\_\_\_

**3-7B**

page 2

11. A child needs to be at least 54 inches tall to use the slide at the public pool. Eliese is 40 inches tall and has been growing at an average rate of 2.5 inches a year. In about how many years will Eliese be able to use the slide at the public pool?
- a. \_\_\_\_\_
- b. \_\_\_\_\_
12. A small truck has the capacity to hold 1,168 pounds. Markus went to the garden supply store to purchase bags of soil that weigh 40 pounds each. He also purchased bags of mulch that weigh 10 pounds each. He bought twice as many bags of mulch as bags of soil. If he weighs 190 pounds, what is the greatest number of bags of soil and mulch that he can carry in his truck?
- a. \_\_\_\_\_
- b. \_\_\_\_\_
13. Hailey will drive no more than 1,400 miles to get to her vacation destination. She has already driven 130 miles. If she drives the same number of miles for 2 days, what is the greatest number of miles she needs yet to drive each day to reach her destination? Round to the nearest whole mile.
- a. \_\_\_\_\_
- b. \_\_\_\_\_
14. Douglas practices piano the same number of hours each day Monday through Friday. He doesn't practice on Saturday, but practices 3 more hours on Sunday than he does on Monday. He should practice more than 15 hours a week. What is the least number of hours he should practice on Monday? Round up to the nearest whole hour.
- a. \_\_\_\_\_
- b. \_\_\_\_\_

**REPRESENTATIONS** Objective F

In 15–17, solve the inequality and graph the solution.

15.  $\frac{3}{7}(14r + 21) \geq 33$

16.  $2.3w - 1.4(w - 1) > 9.5$

17.  $5(3x - 1) - 2(2 - x) \leq -77$

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