Name

5-1A Lesson Master

Questions on SPUR Objectives
See Student Edition pages 367–371 for objectives.

REPRESENTATIONS Objective H

In 1 and 2, write the inequality for the set of numbers that is graphed on the number line.

1. 

2. 

In 3 and 4, solve the inequality, and then graph the solution set on the number line.

3. $2.5a + 7 \geq 22$ _____

4. $10 - 3x > -2$ _____

In 5 and 6, write the compound inequality for the set of numbers that is graphed on the number line.

5. 

6. 

In 7 and 8, graph the solution set on a number line.

7. $\{x \mid -3 \leq x \leq 5\}$

8. $\{t \mid 0 \leq t \leq 4\} \cup \{t \mid t > 6\}$

9. Suppose people 18 and under or 65 and older are eligible for discount fares on city buses.

   a. Write a compound inequality in set notation for a, the ages of people eligible for discount fares. _____

   b. Graph your inequality.

10. Give the CAS output when each of the compound sentences is entered, assuming the variable a is first cleared. Then graph the solution set on the number line at the right of each compound sentence.

    a. $a > -1$ and $a < 2$ _____

    b. $a > -1$ or $a < 2$ _____

    c. $a < -1$ and $a > 2$ _____

    d. $a < -1$ or $a > 2$ _____