Name Hour

Solving Compound Inequalities

HW 2.5

Write a compound inequality that is represented by the graph.

 1. 

 2. 

 3. 

Write the sentence as an inequality. Graph the inequality.

 4. A number *t* is less than 5 and greater than 3.

 5. A number *m* is less than or greater than or equal to 1.

Solve the inequality. Graph the solution.

 6.  7. 

 8.  9. 

 10. A bike shop rents bikes with heights ranging from 18 inches to 26 inches. The shop says the height of the bike should be about 0.6 times a cyclist's leg length. Write and solve a compound inequality that represents the leg lengths of the cyclists the shop does *not* provide bikes for.

Solve the inequality. Graph the solution, if possible.

 11.  12. 

Name Date

Practice B

2.5

In Exercises 1–3, write a compound inequality that is represented by the graph.

 1.

 2.

 3.

In Exercises 4 and 5, write the sentence as an inequality. Graph the inequality.

 4. A number *d* is less than or equal to 2 and greater than or equal to 

 5. A number *m* is no less than –1 or less than or equal to 

In Exercises 6–11, solve the inequality. Graph the solution.

 6.  7. 

 8.  9. 

 10.  11. 

 12. A tuxedo rental shop rents tuxedos with sleeve lengths from 20 inches to
40 inches. The shop says the length of the sleeves should be about 1.2 times
a person's arm length. Write and solve a compound inequality that represents
the arm lengths of people the shop does *not* provide tuxedos for.

In Exercises 13–16, solve the inequality. Graph the solution, if possible.

 13.  14. 

 15.  16. 

 17. Write a real-life story that can be modeled by the graph.

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