2-8 Skills Practice Graphing Linear and Absolute Value Inequalities

Graph each inequality.







7. x - y > -2



10. $y - 7 \le -9$







3. $x + y \le 4$



6. $y \ge -x$



9. $y + 1 \ge 2x$



12. y > |x|





	УА	
4	0	×

8. $9x + 3y - 6 \le 0$

	<i>Y</i> ↑	
•	0	X

11. x > -5



2-8 Word Problem Practice Graphing Linear and Absolute Value Inequalities

1. FRAMES The dimensions of a rectangular frame that can be made from a 50 inch plank of wood are limited by the inequality $\ell + w \le 25$. Graph this inequality.

NAME



2. BUILDING CODE A city has a building code that limits the height of buildings around the central park. The code says that all buildings must be less than 0.1x in height where *x* is the distance of the building from the center of the park. Assume that the park center is located at 0. Graph the inequality that represents the building code.



3. LIVESTOCK During the winter, a horse requires about 36 liters of water per day and a sheep requires about 3.6 liters per day. A farmer is able to supply his horses and sheep with a total of 300 liters of water each day. Write an inequality that represents the possible number of horses and sheep this farmer can keep. **4. WEIGHT** A delivery crew is going to load a truck with tables and chairs. The trucks weight limitations are represented by the inequality 200t + 60c < 1200, where *t* is the number of tables and *c* is the number of chairs. Graph this inequality.



- **5. ART** An artist can sell each drawing for \$100 and each painting for \$400. He hopes to make at least \$2000 every month.
 - **a.** Write an inequality that expresses how many paintings and/or drawings the artist needs to sell each month to reach his goal.
 - **b.** Graph the inequality.



c. If David sells three paintings one month, how many drawings would he have to sell in the same month to reach \$2000?