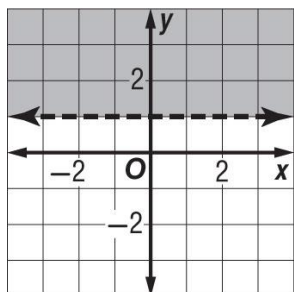


2-8 Skills Practice

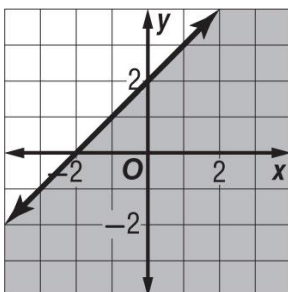
Graphing Linear and Absolute Value Inequalities

Graph each inequality.

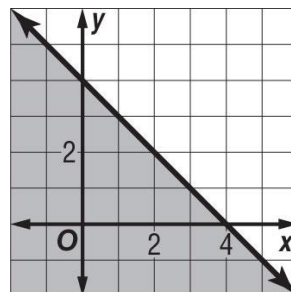
1. $y > 1$



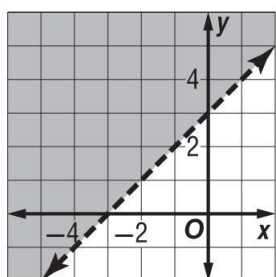
2. $y \leq x + 2$



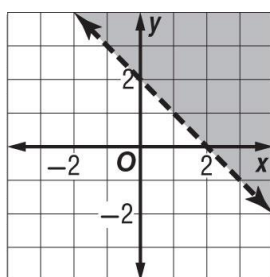
3. $x + y \leq 4$



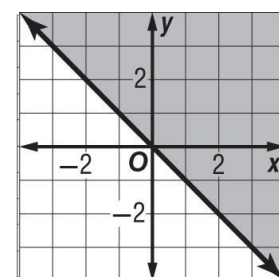
4. $x + 3 < y$



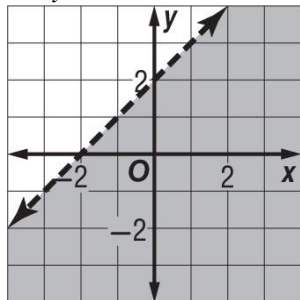
5. $2 - y < x$



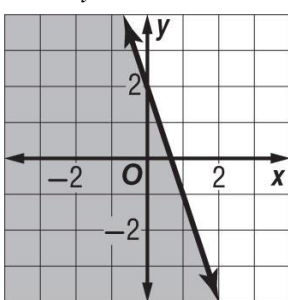
6. $y \geq -x$



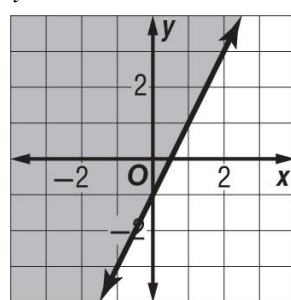
7. $x - y > -2$



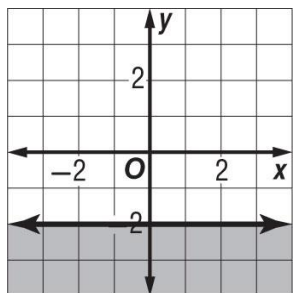
8. $9x + 3y - 6 \leq 0$



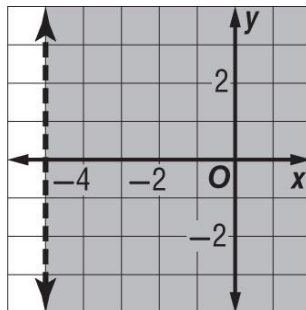
9. $y + 1 \geq 2x$



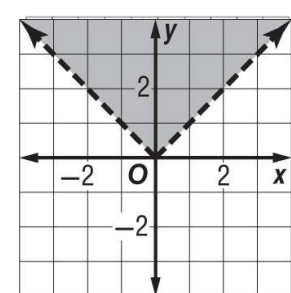
10. $y - 7 \leq -9$



11. $x > -5$



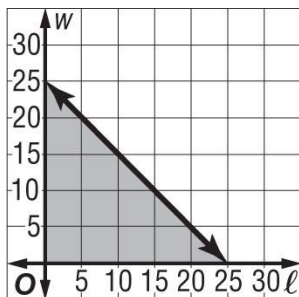
12. $y > |x|$



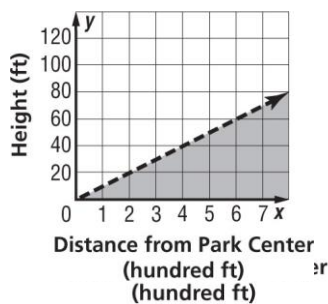
2-8 Word Problem Practice

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 $\ell + w \leq 25$. Graph this inequality.



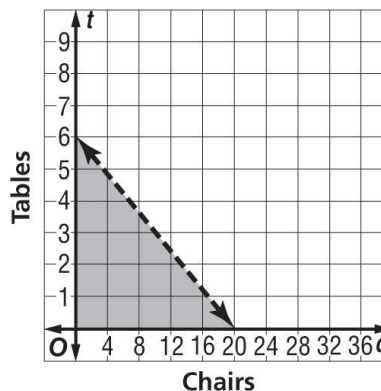
- 2. BUILDING CODE** A city has a building code that limits the height of buildings around the central park. The code says that all buildings must be less than $0.1x$ in height where x is the distance of the building from the center of the park. Assume that the park center is located at 0. Graph the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

$$36h + 3.6s \leq 300$$

- 4. WEIGHT** A delivery crew is going to load a truck with tables and chairs. The truck's 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.

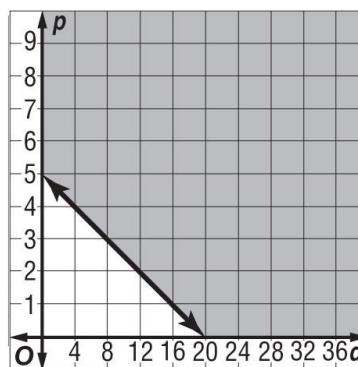


- 5. ART** An artist can sell each drawing for \$100 and each painting for \$400. He hopes to make at least \$2000 every month.

- a. Write an inequality that expresses how many paintings and/or drawings the artist needs to sell each month to reach his goal.

$$100d + 400p \geq 2000$$

- 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?

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