

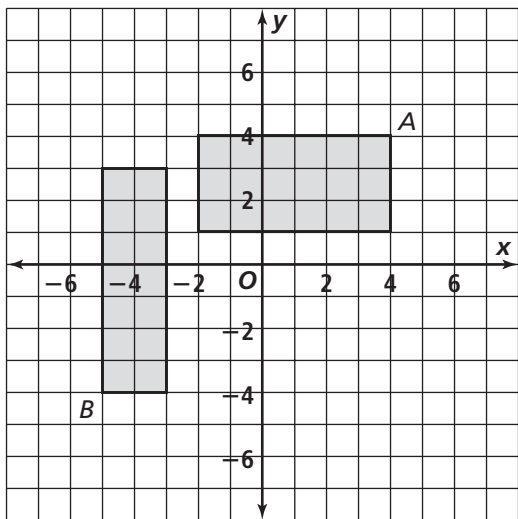
Alternative Assessment

Form C

Chapter 3

TASK 1

Write inequalities to describe the shaded regions.

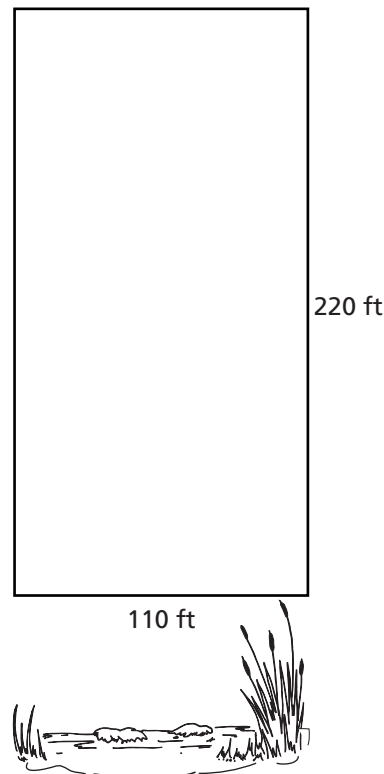


- a. Region A
- b. Region B

TASK 2

An architect is designing a new lakefront cottage. He must consider the building codes in the design. The rectangular lot on which the cottage will be built is 220 ft long and has 110 ft of frontage on the lake.

- a. The building code states that a building must be no closer than 25 ft to the lot line. Write and solve an inequality to determine how long the cottage front facing the lake may be.
- b. The buyers expect that the cost of the cottage will be about \$125,000. They are able to deviate from this cost by no more than \$12,500. Write and solve an absolute value inequality to find the range of costs. Explain your answer.



Alternative Assessment (continued)**Form C****Chapter 3****TASK 3**

- a. Suppose you play third base for your high school softball team. In the last four games, you had a total of 6 hits in 15 at-bats. Assuming you will have 4 at-bats in tomorrow's game, how many hits will you need in order to have a batting average greater than .450? Write and solve an inequality to find the number of hits you need.
- b. Write two inequalities that require that you to use the addition, subtraction, multiplication, and division properties in order to solve them. Solve the inequalities you wrote and graph the solutions on a number line.

TASK 4

- a. Explain the difference between a compound inequality containing the word *and*, and a compound inequality containing the word *or*.
- b. Write a compound inequality containing the word *and*. Solve and graph your inequality.
- c. Write a compound inequality containing the word *or*. Solve and graph your inequality.
- d. Look at the inequality below. Without solving it, explain which numbers from the given replacement set are reasonable solutions.

$$|m - 1| \geq 2$$

replacement set: $\{-3, -1, 0, 1, 3\}$

- e. Now, solve and graph the inequality in part d on a number line. Use the set of integers as the replacement set. If there is no solution, write *no solution*.