39. WRITING Can you use (0, 0) as a test point when graphing $2x > -5y$? *Explain* your reasoning.

TRANSLATING SENTENCES **Write the verbal sentence as an inequality. Then graph the inequality.**

40. Four less than x is greater than or equal to y.

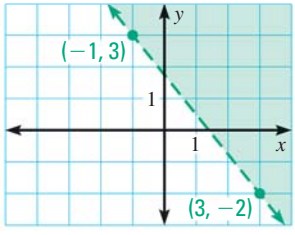
41. The product of -2 and y is less than or equal to the sum of x and 6.

42. The quotient of y and 2 is greater than the difference of 7 and x.

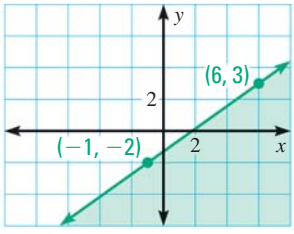
43. The sum of x and the product of 4 and y is less than -3.

USING A GRAPH **Write an inequality of the graph shown.**

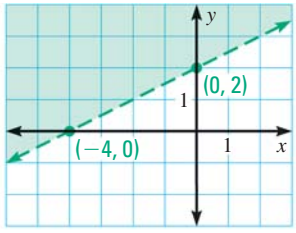
44.



45.



46.



WRITING INEQUALITIES **Write an inequality whose graph contains only the points in the given quadrants.**

47. Quadrants I and II

48. Quadrants II and III

49. Quadrants III and IV

50. Quadrants I and IV

CHALLENGE **In Exercises 51 and 52, write and graph an inequality whose graph is described by the given information.**

51. The points (2, 5) and $(-3, -5)$ lie on the boundary line. The points (6, 5) and $(-2, -3)$ are solutions of the inequality.

52. The points $(-7, -16)$ and (1, 8) lie on the boundary line. The points $(-7, 0)$ and (3, 14) are *not* solutions of the inequality.

PROBLEM SOLVING

EXAMPLE 6
on p. 408
for Exs. 53–57

53. BOBSLEDS In a two-man bobsled competition, the sum of the weight x (in pounds) of the bobsled and the combined weight y (in pounds) of the athletes must not exceed 860 pounds. Write and graph an inequality that describes the possible weights of the bobsled and the athletes. Identify and interpret one of the solutions.

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54. ELEVATORS The number y of passengers riding an elevator can be no greater than the elevator's maximum weight capacity x (in pounds) divided by 150. Write and graph an inequality that relates the number of passengers to the maximum weight capacity. Identify and interpret one of the solutions.

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= WORKED-OUT SOLUTIONS on p. WS1 = TAKS PRACTICE AND REASONING = MULTIPLE REPRESENTATIONS