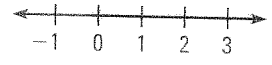
SOLVING AND MATCHING **Solve the inequality. Then match the solution with its graph.**

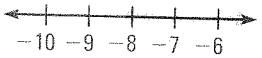
35. $d + 4 \leq 6$ **36.** $x - 3 > 2$ **37.** $q + 12 \geq 4$

38. $h + 6 \leq -2$ **39.** $s - 5 \geq -5$ **40.** $v - 3 < 2$

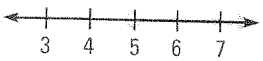
A.



B.

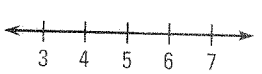


C.

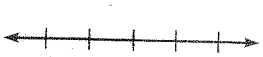


D.

E.



F.



Student Help

HOMEWORK HELP

Extra help with problem solving in Exs. 41–55 is available at www.mcdougallittell.com

SOLVING AND GRAPHING **Solve the inequality. Then graph the solution.**

41. $x + 6 < 8$ **42.** $-5 < 4 + f$ **43.** $-4 + f < 20$

44. $8 + w \leq -9$ **45.** $p - 12 \geq -1$ **46.** $-2 > b - 5$

47. $-8 \leq x - 14$ **48.** $m + 7 \geq -10$ **49.** $-6 > c - 4$

50. $-2 + z < 0$ **51.** $-10 > a - 6$ **52.** $5 + r \geq -5$

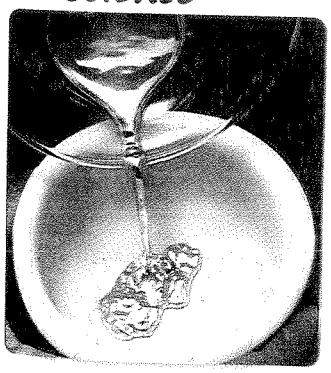
53. $x - 5 \geq 7$ **54.** $14 \leq 8 + n$ **55.** $c + 11 < 25$

56. CRITICAL THINKING Jesse finished a 200 meter dash in 35 seconds. Let r represent any rate of speed in meters per second faster than Jesse's.

a. Write an inequality that describes r. Then graph the inequality.

b. Every point on the graph represents a rate faster than Jesse's. Do you think every point could represent the rate of a runner?

Link to Science



MERCURY The melting point of mercury is the temperature at which mercury becomes a liquid. Mercury is the only metal that is a liquid at room temperature.

More about mercury is available at www.mcdougallittell.com

57. WALKING RACE A racer finished a 5 kilometer walking race in 45 minutes. Let r represent any faster rate in kilometers per minute. Write an inequality that describes r.

58. Science Link Mercury has the lowest melting point of any metallic element, $-38.87°C$. Let p represent the melting point in degrees Celsius of any other metallic element. Write an inequality that describes p.

59. ASTRONOMICAL DISTANCES The star Altair is about 5 parsecs from Earth. (A parsec is about 3.26 light years.) Let d represent the distance from Earth of any point in space that is more distant than Altair. Write an inequality that describes d in light years. Then graph the inequality.

60. SHARKS On July 27, 1999, a mako shark weighing 1324 pounds was caught off the coast of Massachusetts by a fisherman named Kevin Scola. It was the biggest mako shark ever caught using a rod and reel. Let w represent the possible weight in pounds of any mako shark caught before that time using a rod and reel. Write and graph an inequality that shows all possible values of w.

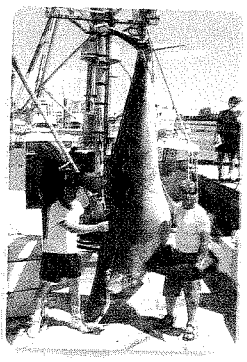


Photo by Kevin Scola of the fishing vessel *Survival*