

4. In Exercises 33 and 34, find and correct the error.

33.
$$\begin{aligned} -3x &\geq 15 \\ \frac{-3x}{-3} &\geq \frac{15}{-3} \\ x &\geq -5 \end{aligned}$$

34.
$$\begin{aligned} -\frac{1}{2}x &\leq 0 \\ -2\left(-\frac{1}{2}x\right) &\geq -2(0) \\ x &\geq -2 \end{aligned}$$

SOVING INEQUALITIES Solve the inequality. Then graph the solution.

35. $15p < 60$

36. $6k > -120$

37. $\frac{2}{3}j \leq -12$

38. $-a > -100$

39. $-\frac{1}{5}n < 12$

40. $20y \geq 50$

41. $11 \geq -\frac{1}{3}m$

42. $-18x \geq 9$

43. $-\frac{a}{10} \leq -2$

44. $\frac{3}{4}z \geq 24$

45. $-12r \geq -18$

46. $-4f \leq 14$

ESTIMATION Estimate the solution and explain your method.

47. $10 > 1.999d$

48. $\frac{1}{2}r \leq -50.1155$

49. $-\frac{1}{3}a \geq 5.91$

LOGICAL REASONING Complete the statement with *always*, *sometimes*, or *never*.

50. If k is greater than 0, then kx is ? greater than 0.

51. If k is greater than 0 and x is greater than zero, then kx is ? greater than 0.

52. If k is less than 0, then kx is ? greater than 0.

53. If k is less than 0 and x is greater than zero, then kx is ? greater than 0.

54. You want to buy some posters to decorate your dorm room. Posters are on sale for \$5 each. Write and solve an inequality to determine how many posters you can buy and spend no more than \$25.

55. Musicians are planning a fundraiser for local farmers. The admission fee will be \$20. Write and solve an inequality to determine how many tickets must be sold to raise at least \$25,000.

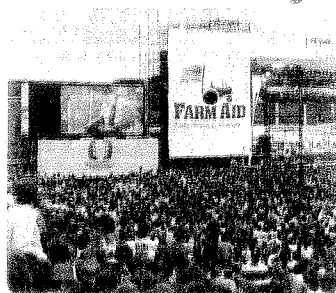
56. **FIGURE SKATING** Aisha plans to take figure skating lessons. She can rent skates for \$5 per lesson. She can buy skates for \$75. For what number of lessons is it cheaper for Aisha to buy rather than rent skates?

57. **TRAVEL** You can ride the subway one-way for \$.85. A monthly pass costs \$27.00. For what number of rides is it cheaper to pay the one-way fare than to buy the monthly pass?

58. **CHALLENGE** Solve the inequality $\frac{4}{x} \geq 2$ by multiplying each side by x .

HINT: Consider the cases $x > 0$ and $x < 0$ separately.

Link to
Fundraising



FARM AID Concerts are often used to raise funds for charity. The Farm Aid concerts have raised over \$14.5 million for American farmers since 1985.