

Practice B

For use with pages 340–345

Solve the inequality.

1. $7x - 30 < 19$

2. $-7 - 4x < 13$

3. $3x - 1 > 1$

4. $2x + 5 \leq 9$

5. $-3x - 5 < 16$

6. $-4x - 7 \geq -15$

7. $6x + 1 \leq -2$

8. $2x + 3 < 6x - 1$

9. $3x - 2 \geq 7x - 10$

10. $2x - 14 > 4x + 4$

11. $6x + 3 \leq 3(x + 2)$

12. $-2(x + 4) > 6x - 4$

13. $7 - 3x \geq x + 9$

14. $\frac{2}{3}x - 8 > -4$

15. $-12 \leq \frac{3}{5}x - 18$

16. $7x - 2 \leq -3(x - 2)$

17. $7 - 5x > 9 - 4x$

18. $3x - 4 \leq 2x - 4$

School Enrollment In Exercises 19–20, use the following information.

In 1990 the enrollment at Trenton East High School was 840. From 1990 through 1996 the enrollment increased at an average rate of 24 students per year.

19. Write a linear model for the enrollment at Trenton East High School. Let x represent the number of years since 1990.
20. Trenton East was built to hold 900 students. Write a linear inequality that represents the possible number of years since 1990 when the school's enrollment was less than the maximum capacity for which the school was built. Solve the inequality.
21. **Water Park** A water park charges \$12 for admission and \$5 to park your vehicle. Write an inequality that represents the possible number of people that could go for \$50. Solve the inequality. What is the maximum number of people that could go?
22. **Midway Games** You want to go to the state fair and try your luck playing the games on the midway. The entrance fee is \$5 and the games are each \$1.50. Write an inequality that represents the possible number of games you can play if you have \$25. Solve the inequality. What is the maximum number of games you can play?

23. **Chicken or Pork?** From 1960 to 1990, the average annual U.S. consumption of pork dropped from 62 pounds to 52 pounds. The average annual consumption of chicken rose from 31 pounds to 66 pounds. For which years did the U. S. consumption of chicken exceed the consumption of pork?

24. **Geometry Connection** Write an inequality for the values of x . Solve.

