Evaluate the variable expression when *y* = 3 and *x* = 5.

1. $5y + x^2$ **2.** $\dfrac{24}{y} - x$ **3.** $2y + 9x - 7$ **4.** $(5y + x) \div 4$

In Exercises 5–7, write the expression in exponential form.

5. $5y \cdot 5y \cdot 5y \cdot 5y$ **6.** nine cubed **7.** six to the *n*th power

8. Insert grouping symbols in $5 \cdot 4 + 6$ so that the value of the expression is 50.

9. TRAVEL If you can travel only 35 miles per hour, is 3 hours enough time to get to a concert that is 100 miles away? Give the expression you used to find the answer.

Write the phrase or sentence as a variable expression, an equation, or an inequality.

10. 7 times a number *n* **11.** *x* is at least 90. **12.** quotient of *m* and 2

13. *y* decreased by 3 **14.** 8 minus *s* is 4. **15.** 9 is less than *t*.

In Exercises 16–21, decide whether the statement is *true* or *false*.

16. $(2 \cdot 3)^2 = 2 \cdot 3^2$ **17.** $8 - 6 = 6 - 8$ **18.** The sum of 1 and 3 is 4.

19. $x^3 = 8$ when $x = 2$ **20.** $9x > x^3$ when $x = 3$ **21.** $8 \le y^2$ when $y = 3$

22. The senior class is planning a trip that will cost $35 per student. If $3920 has been collected, how many seniors have paid for the trip?

MARCHING BAND In Exercises 23 and 24, use the following information.
Members of the marching band are making their own color-guard flags. Each rectangular flag requires 0.6 square yards of material. The material costs $2 per square yard.

23. Write a verbal model that relates the number of flags and the total cost of the material.

24. How much will it cost to make 20 flags?

PET OWNERS In Exercises 25 and 26, use the table showing the number of pet owners in your eighth-grade class.

25. Draw a bar graph of the data.

26. From the bar graph, what is the most popular household pet?

Kind of pet	Number of pet owners
Hamster	7
Dog	12
Cat	15
Bird	4
Fish	5