1.4 EXERCISES

HOMEWORK KEY

○ = **WORKED-OUT SOLUTIONS** on p. 000 for Exs. 7 and 39

= **TAKS PRACTICE AND REASONING** Exs. 16, 37, 44, 45, 46, 49, and 50

SKILL PRACTICE

1. **VOCABULARY** Give an example of an open sentence.

2. **WRITING** *Describe* the difference between an expression and an equation.

EXAMPLE 1 on p. 21 for Exs. 3–16

WRITING OPEN SENTENCES **Write an equation or an inequality.**

3. The sum of 42 and a number n is equal to 51.

4. The difference of a number z and 11 is equal to 35.

5. The difference of 9 and the quotient of a number t and 6 is 5.

6. The sum of 12 and the quantity 8 times a number k is equal to 48.

7. The product of 9 and the quantity 5 more than a number t is less than 6.

8. The product of 4 and a number w is at most 51.

9. The sum of a number b and 3 is greater than 8 and less than 12.

10. The product of 8 and a number k is greater than 4 and no more than 16.

11. The difference of a number t and 7 is greater than 10 and less than 20.

STORE SALES **Write an inequality for the price p (in dollars) described.**

12. 

13. 

ERROR ANALYSIS ***Describe*** **and correct the error in writing the verbal sentence as an equation or an inequality.**

14. The sum of a number n and 4 is no more than 13.

$n + 4 < 13$ ✗

15. The quotient of a number t and 4.2 is at most 15.

$\frac{t}{4.2} > 15$ 13 ✗

16. **TAKS REASONING** Which equation corresponds to the sentence "The product of a number b and 3 is no less than 12"?

(A) $3b < 12$ (B) $3b \leq 12$ (C) $3b > 12$ (D) $3b \geq 12$

EXAMPLE 2 on p. 22 for Exs. 17–28

CHECK POSSIBLE SOLUTIONS **Check whether the given number is a solution of the equation or inequality.**

17. $x + 9 = 17$; 8

18. $9 + 4y = 17$; 1

19. $6f - 7 = 29$; 5

20. $\frac{k}{5} + 9 = 11$; 10

21. $\frac{r}{3} - 4 = 4$; 12

22. $\frac{x - 5}{3} \geq 2.8$; 11

23. $15 - 4y > 6$; 2

24. $y - 3.5 < 6$; 9

25. $2 + 3x \leq 8$; 2

26. $2p - 1 \geq 7$; 3

27. $4z - 5 < 3$; 2

28. $3z + 7 > 20$; 4