Skill and Concept Check

1. **Identify** the coefficient and constant in the expression $2x - 6$.
2. **OPEN ENDED** Write an algebraic expression that involves multiplication and addition.
3. **Which One Doesn't Belong?** Identify the expression that does not have the same characteristic as the other three. Explain your reasoning.

$4x$ $\quad ab \quad$ $r \cdot 8$ $\quad \frac{x}{y}$

GUIDED PRACTICE

Evaluate each expression if $a = 3$, $b = 5$, and $c = 4$.

4. $a + 7$
5. $4b$
6. $b + c$
7. $6c - a$
8. $\frac{c}{4}$
9. $\frac{5c + b}{5}$
10. $4b^2$
11. $\frac{3c^2}{a}$
12. What operations are used in the algebraic expression $\frac{xyz}{2}$?
13. Evaluate $n^2 + 1$ if $n = 2$.

Practice and Applications

Evaluate each expression if $d = 8$, $e = 3$, $f = 4$, and $g = 1$.

14. $d + 9$
15. $10 - e$
16. $4f$
17. $8g$
18. $f - e$
19. $d + f$
20. $10g - 6$
21. $8 + 5d$
22. $7e + 2d$
23. $\frac{d}{5}$
24. $\frac{16}{f}$
25. $\frac{5d - 25}{5}$
26. e^2
27. $\frac{d^2}{2}$
28. $6f^2$
29. $11.9d - 10e$
30. $\frac{2f}{g^2}$
31. $\frac{2.5f + 5}{3}$
32. $7e^2 + 5$
33. $\frac{(5 + g)^2}{2}$
34. Evaluate $9h + h^2$ if $h = 3.5$.
35. For what value of x is the expression x^2 equal to 9?

HOMEWORK HELP

For Exercises	See Examples
14–19	1
20–22	2
23–25	3
26–35	4
38–40, 43–45	5

Extra Practice See pages 565, 596.