Practice 79

For use with Section 10-4

Simplify.

1. $a^3 \cdot a^2$

2. $n^4 \cdot n^3$

3. $x^2 \cdot x^6$

4. $b^6 \cdot b^2 \cdot b$

5. $r^4 \cdot r^2 \cdot r^3$

6. $5c^3 \cdot c^5$

7. $6p^8 \cdot 4p^3$

8. $-10z^6 \cdot 3z^4$

9. $(8k^7)(-3k^3)$

10. $(-7x^6)(2x^3)$

11. $(11y)(-4y^5)$

12. $(-n^7)(-6n^8)$

13. $x^3y \cdot x^7y^2$

14. $(a^4b^3)(-a^6b^5)$

15. $(-m^4n^2)(mn^6)$

16. $(-5u^2v^3)(4uv^2)$

17. $3xy^2 \cdot 8xy^4$

18. $(-3j^3k)(-5j^2k^2)$

Simplify.

19. $(x^4)^3$

20. $(y^2)^5$

21. $(c^3)^2$

22. $(2n)^5$

23. $(-2k)^4$

24. $(-3r)^3$

25. $(xy^2)^5$

26. $(-m^5n)^2$

27. $(-a^2b^3)^3$

28. $(-2r^2s)^4$

29. $(4uv^5)^3$

30. $(-2x^2y^3)^7$

31. $a^5(3a^3)^2$

32. $(-2a^4)(2a^2)^5$

33. $(4n)(-2n^3)^4$

34. Write an expression in simplified form for the area of the square at the right.
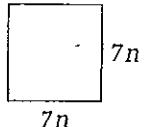
35. Write an expression in simplified form for the volume of the cube at the right.

$7n$

$7n$

$3p^2$

$3p^2$

$3p^2$

$3p^2$
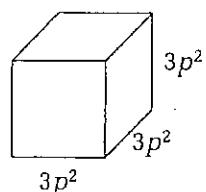
Insert parentheses in the expression on the left side of each equation to make a true statement.

36. $3c^2d^4 = 81c^8d^4$

37. $2x^3y^5 = 8x^3y^5$

38. $3a^2b^4 = 3a^8b^4$