## Answers for Lesson 2-7, pp. 88–89 Exercises

1. C
2. A
3. B
4. Yes; $x^2 \cdot x^3 = x \cdot x \cdot x \cdot x \cdot x$, which is $x^5$.
5. $9^3 \cdot x$
6. $4^5$
7. $z^6$
8. $-64$
9. 64
10. $-7$
11. $4^2 \cdot 8^4$
12. $6^3 \cdot 11$
13. $5^2 \cdot x^3 \cdot y$
14. $9 \cdot a^2 \cdot b \cdot c^3$
15. $m^2 \cdot p^3$
16. $7^2 \cdot t^2 \cdot w$
17. $-32$
18. $-32$
19. $-216$
20. $-216$
21. $-225$
22. 225
23. 81
24. 81
25. 57
26. 51
27. 41
28. 23
29. 8
30. $-24$
31. 3,391.2 $cm^3$
32. 214 square units
33. $-360$
34. 148
35. 2
36. 405
37. 112 ft
38. 256 ft
39. No; the product of any number and itself is always positive. For example, $3^2 = 3 \cdot 3 = 9$, and $(-3)^2 = -3 \cdot -3 = 9$.
40. 226.08 cubic units
41. yes; when $a = 0$ or $b = 0$, and when $a = 1$
42. Sample answer: $5 \cdot 5 \cdot 5 - 5 \cdot 5$
43. D
44. F
45. C
46. $\frac{3}{10}$
47. $6\frac{9}{25}$
48. $\frac{3}{1000}$
49. $\frac{9}{20}$