

Practice A

For use with pages 93–98

Find the product.

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|--------------------|---------------------------------|----------------------------------|
| 1. $(-8)(5)$ | 2. $(4)(-7)$ | 3. $(-4)(-12)$ |
| 4. $(6)(-10)$ | 5. $(-7)(-3)$ | 6. $(-12)(3)$ |
| 7. $(4)(-2)(-3)$ | 8. $(-5)(10)(-3)$ | 9. $(7)(-2)(5)$ |
| 10. $(-6)(-8)(-1)$ | 11. $(2)(-3)(-1)(-\frac{2}{3})$ | 12. $(-4)(-3)(-7)(-\frac{1}{2})$ |

Simplify the variable expression.

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|--------------------------|-------------------------------------|-------------------------------|
| 13. $(5)(-x)$ | 14. $(-2)(-y)$ | 15. $(-4)(-x)(-x)$ |
| 16. $6(-a)(-a)(-a)$ | 17. $-(-y)^2$ | 18. $(-3)(-t)^2$ |
| 19. $(-y)^2(y)^2$ | 20. $-7(-m)^3$ | 21. $(-3)(z)^2(z)$ |
| 22. $(\frac{1}{2})(-2x)$ | 23. $(-\frac{5}{7})(-\frac{7}{5}x)$ | 24. $(-\frac{3}{4})(-k)(-4k)$ |

Evaluate the expression.

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|--------------------------------|-----------------------------------|----------------------------------|
| 25. $-4x$ when $x = 3$ | 26. $-5(t)(-t)$ when $t = -4$ | 27. $x^3 + 2$ when $x = -2$ |
| 28. $2y^3 - 3$ when $y = -3$ | 29. $-x^3 + 2x$ when $x = 5$ | 30. $3m + m^2$ when $m = -5$ |
| 31. $-2(y - 5)$ when $y = 3$ | 32. $-x^2 - 5x + 7$ when $x = -2$ | 33. $2x^2 - 3x + 1$ when $x = 2$ |

Complete the statement using = or \neq .

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|--|---|
| 34. $5(-4) \underline{\quad ? \quad} (-4)(5)$ | 35. $(3)(-2)(-x) \underline{\quad ? \quad} (-x)(-2)(3)$ |
| 36. $(-\frac{1}{2})(-2)(-h) \underline{\quad ? \quad} h$ | 37. $-(5)^2 \underline{\quad ? \quad} (-5)^2$ |
| 38. $(-x)(-x)(-x) \underline{\quad ? \quad} -x^3$ | 39. $(-a)(-a)(-a)(-a) \underline{\quad ? \quad} -a^4$ |
| 40. $(-\frac{2}{3}x)(-\frac{3}{2}x) \underline{\quad ? \quad} 1$ | 41. $(5x)(5x)(5x) \underline{\quad ? \quad} 3(5x)$ |

42. **Bike Tire** There is a slow leak in your bike tire. It is losing air at a rate of 2 pounds per square inch per day. Let x represent the amount of air in the tire now. Write an expression for the amount of air in the tire after 3 days. If the amount of air in the tire is now 75 pounds per square inch, find the amount of air in the tire after 3 days.

43. **Draining Water** Water is being drained out of a tank at a rate of 10 cubic feet per minute. Let W represent the amount of water in the tank now. Write an expression for the amount of water in the tank after 7 minutes. If the amount of water in the tank is now 1000 cubic feet, find the amount of water in the tank after 7 minutes.