



ACT COMPASS Preparation Worksheet

Pre-algebra: Scientific Notation

Write each number in scientific notation.

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|-------------|---------------------|------------------------|---------------------------|
| 1. 0.000006 | 5. 6.7 | 9. 48900 | 13. 0.0042 |
| 2. 5400000 | 6. 0.0000002 | 10. 0.0000009 | 14. 0.15×10^{-2} |
| 3. 60 | 7. 2000000 | 11. 0.63×10^1 | 15. 4.8 |
| 4. 0.009 | 8. 71×10^3 | 12. 0.000216 | |

Write each number in standard notation.

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|------------------------|---------------------------|--------------------------|------------------------|
| 16. 2×10^{-1} | 20. 7.75×10^{-1} | 24. 0.9×10^{-3} | 28. 8.4×10^5 |
| 17. 2×10^5 | 21. 8.3×10^7 | 25. 38×10^2 | 29. 4×10^{-5} |
| 18. 804×10^2 | 22. 9.5×10^7 | 26. 7.5×10^{-5} | |
| 19. 2.66×10^4 | 23. 1.71×10^7 | 27. 4×10^0 | |

Simplify. Write each answer in scientific notation.

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| 30. $(2 \times 10^{-4})(8.1 \times 10^{-1})$ | 36. $\frac{4 \times 10^4}{3.63 \times 10^{-4}}$ |
| 31. $(3.48 \times 10^3)(9.8 \times 10^4)$ | 37. $\frac{9 \times 10^{-5}}{9.24 \times 10^{-6}}$ |
| 32. $(6 \times 10^3)(9.91 \times 10^0)$ | 38. $\frac{8.42 \times 10^3}{5 \times 10^2}$ |
| 33. $(8.8 \times 10^2)(2.25 \times 10^{-2})$ | 39. $\frac{8.9 \times 10^6}{8.4 \times 10^6}$ |
| 34. $(4 \times 10^{-5})^{-6}$ | 40. $\frac{1.18 \times 10^{-4}}{3 \times 10^0}$ |
| 35. $(8.9 \times 10^5)^4$ | |