### 9.4 Practice

<table>
<thead>
<tr>
<th>Write the number in scientific notation.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 72,000,000 7.2 × 10⁷</td>
</tr>
<tr>
<td>5. 45,900,000,000 4.59 × 10¹⁰</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Multiple Choice</th>
</tr>
</thead>
</table>
| 9. **MULTIPLE CHOICE** Which number represents 54,004,000,000 written in scientific notation?
| A 54004 × 10⁶ | B 54.004 × 10⁹ | C 5.4004 × 10¹⁰ | D 0.54004 × 10¹¹ |

<table>
<thead>
<tr>
<th>Write the number in standard form.</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. 2.6 × 10³ 2,600</td>
</tr>
<tr>
<td>14. 6.1 × 10⁻³ 0.0061</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Error Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>18. <strong>ERROR ANALYSIS</strong> Describe and correct the error in writing 1.24 × 10⁻³ in standard form. 1.24 × 10⁻³ = 0.00124</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fill in the blank with &lt;, &gt;, or =</th>
</tr>
</thead>
<tbody>
<tr>
<td>19. 5.6 × 10³  56,000</td>
</tr>
<tr>
<td>21. 4.5 × 10⁶  450,000</td>
</tr>
</tbody>
</table>
Evaluate the expression. Write your answer in scientific notation.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>23. ((4.4 \times 10^3)(1.5 \times 10^{-7}))</td>
<td>24. ((7.63 \times 10^{-5})(5.8 \times 10^2))</td>
<td>25. ((8.1 \times 10^{-4})(9 \times 10^{-6}))</td>
</tr>
<tr>
<td>(6.6 \times 10^{-4})</td>
<td>(4.4254 \times 10^{-3})</td>
<td>(7.29 \times 10^{-9})</td>
</tr>
<tr>
<td>26. (\frac{6 \times 10^{-3}}{8 \times 10^{-8}})</td>
<td>27. (\frac{5.4 \times 10^{-5}}{1.8 \times 10^{-2}})</td>
<td>28. (\frac{4.1 \times 10^4}{8.2 \times 10^8})</td>
</tr>
<tr>
<td>(0.75 \times 10^3)</td>
<td>(3 \times 10^{-3})</td>
<td>(5 \times 10^{-5})</td>
</tr>
<tr>
<td>(7.5 \times 10^2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29. ((5 \times 10^{-8})^5)</td>
<td>30. ((7 \times 10^{-5})^4)</td>
<td>31. ((1.4 \times 10^3)^2)</td>
</tr>
<tr>
<td>(5^5 \times 10^{-20})</td>
<td>(7^4 \times 10^{-20})</td>
<td>(1.4^2 \times 10^6)</td>
</tr>
<tr>
<td>(3.125 \times 10^{-10})</td>
<td>(401 \times 10^{-20})</td>
<td></td>
</tr>
<tr>
<td>(3.125 \times 10^{-17})</td>
<td>(2.401 \times 10^{-17})</td>
<td></td>
</tr>
</tbody>
</table>

Multiple Choice

32. ★ *MULTIPLE CHOICE* Which number is the value of \(\frac{1.235 \times 10^4}{9.5 \times 10^{-7}}\)?

   - A. \(0.13 \times 10^{-4}\)
   - B. \(1.3 \times 10^{-4}\)
   - C. \(1.3 \times 10^{-3}\)
   - D. \(0.13 \times 10^3\)

   **Answer:** B