

HOMEWORK 9 Term 2 Sheet 4 advanced

<p>1. If the diameter of the Earth is 13 000 000m then the radius is:</p> <p>A. <input type="radio"/> <math>6.5 \times 10^6</math> m</p> <p>B. <input type="radio"/> <math>6.5 \times 10^7</math> m</p> <p>C. <input type="radio"/> <math>1.3 \times 10^7</math> m</p> <p>D. <input type="radio"/> <math>1.3 \times 10^6</math> m</p> <p>E. <input type="radio"/> <math>2.6 \times 10^7</math> m</p>	<p>2.</p> <p><math>4 \times 3^{-2}</math> is equal to</p> <p>Click on the correct answer.</p> <p>A. <input type="radio"/> <math>\frac{1}{144}</math></p> <p>B. <input type="radio"/> <math>\sqrt{12}</math></p> <p>C. <input type="radio"/> <math>4\sqrt{3}</math></p> <p>D. <input type="radio"/> <math>\frac{4}{9}</math></p>	<p>3.</p> <p><math>0.205 \times 10^3</math> is equal to</p> <p>Click on the correct answer.</p> <p>A. <input type="radio"/> 0.000205</p> <p>B. <input type="radio"/> 0.0205</p> <p>C. <input type="radio"/> 2.05</p> <p>D. <input type="radio"/> 205</p>				
<p>4. Which one of the following represents 72 as a product of its prime factors?</p> <p>A. <input type="radio"/> <math>2^3 \times 3^2</math></p> <p>B. <input type="radio"/> <math>2^1 \times 6^2</math></p> <p>C. <input type="radio"/> <math>2^2 \times 3^3</math></p> <p>D. <input type="radio"/> <math>9 \times 2^3</math></p>	<p>5. 87 900 can be written as:</p> <p>A. <input type="radio"/> <math>8.79 \times 10^{-3}</math></p> <p>B. <input type="radio"/> <math>8.79 \times 10^3</math></p> <p>C. <input type="radio"/> <math>8.79 \times 10^{-4}</math></p> <p>D. <input type="radio"/> <math>8.79 \times 10^4</math></p> <p>E. <input type="radio"/> <math>8.79 \times 10^5</math></p>	<p>6. In which list are the numbers listed in ascending order?</p> <p>A. <input type="radio"/> <math>5^3, 6^2, 10^3, 20^2</math></p> <p>B. <input type="radio"/> <math>5^3, 6^2, 20^2, 10^3</math></p> <p>C. <input type="radio"/> <math>6^2, 20^2, 5^3, 10^3</math></p> <p>D. <input type="radio"/> <math>6^2, 5^3, 20^2, 10^3</math></p> <p>E. <input type="radio"/> <math>6^2, 5^3, 10^3, 20^2</math></p>				
<p>7.</p> <p>Simplify <math>\left(\frac{1}{2}\right)^4 \div \left(\frac{3}{2}\right)^2</math></p> <p>Click on the correct answer.</p> <p>A. <input type="radio"/> <math>\left(\frac{3}{2}\right)^6</math></p> <p>B. <input type="radio"/> <math>\left(\frac{3}{2}\right)^8</math></p> <p>C. <input type="radio"/> <math>\left(\frac{3}{2}\right)^2</math></p> <p>D. <input type="radio"/> <math>\left(\frac{2}{3}\right)^2</math></p>	<p>8.</p> <p>Evaluate <math>64^{\frac{2}{3}}</math>.</p>	<p>9.</p> $\begin{array}{r} 1001 \\ + \quad ? \\ \hline 1110 \end{array}$ <p>A. <input type="radio"/> 100</p> <p>B. <input type="radio"/> 101</p> <p>C. <input type="radio"/> 110</p> <p>D. <input type="radio"/> 111</p>				
<p>10. Written in scientific notation</p> $\frac{6.52 \times 10^6 + 4.8 \times 10^5}{2 \times 10^{-4}} =$ <p>A. <input type="radio"/> <math>3.5 \times 10^{10}</math></p> <p>B. <input type="radio"/> <math>5.66 \times 10^{10}</math></p> <p>C. <input type="radio"/> <math>3.5 \times 10^{14}</math></p> <p>D. <input type="radio"/> <math>5.66 \times 10^2</math></p>	<p>11.</p> <p>Evaluate <math>81^{\frac{3}{4}}</math>.</p>	<p>12. Arrange from smallest to largest:</p> <table border="1" style="width: 100%; text-align: center;"> <tbody> <tr> <td><math>10_2 \times 10_2</math></td> <td><math>10_2 + 11_2</math></td> </tr> <tr> <td><math>\sqrt{1001}_2</math></td> <td><math>\frac{1000_2}{100_2}</math></td> </tr> </tbody> </table>	$10_2 \times 10_2$	$10_2 + 11_2$	$\sqrt{1001}_2$	$\frac{1000_2}{100_2}$
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