

Content Standard	<p><b>MAFS.8.EE Expressions and Equations</b></p> <p><b>MAFS.8.EE.1 Work with radicals and integer exponents.</b></p> <p><b>MAFS.8.EE.1.3</b> Use numbers expressed in the form of a single digit times an integer power of 10 to estimate very large or very small quantities, and to express how many times as much one is than the other. <i>For example, estimate the population of the United States as 3 times <math>10^8</math> and the population of the world as 7 times <math>10^9</math>, and determine that the world population is more than 20 times larger.</i></p>													
Assessment Limits	N/A													
Calculator	No													
Item Types	Equation Editor Multiple Choice Open Response													
Context	Allowable													
Sample Item		Item Type												
<p>The average mass of a giraffe is approximately <math>1 \times 10^3</math> kilograms. The average mass of a blue whale is approximately <math>2 \times 10^6</math> kilograms.</p> <p>About how many times more mass does a blue whale have than a giraffe?</p>		Equation Editor												
Equation Editor														
<p>The average mass of an ant is approximately <math>3 \times 10^{-3}</math> grams. The average mass of a giraffe is approximately <math>2 \times 10^3</math> kilograms.</p> <p>About how many times more mass does a giraffe have than an ant?</p>														
<div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 5px;"></div> <div style="border: 1px solid #ccc; padding: 5px;"> <div style="border-bottom: 1px solid #ccc; padding-bottom: 5px;"></div> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 5px;"> <span>←</span> <span>→</span> <span>↶</span> <span>↷</span> <span>✕</span> </div> <table border="1" style="border-collapse: collapse; text-align: center; width: 100px;"> <tr><td>1</td><td>2</td><td>3</td></tr> <tr><td>4</td><td>5</td><td>6</td></tr> <tr><td>7</td><td>8</td><td>9</td></tr> <tr><td>0</td><td>.</td><td>-</td></tr> </table> </div>			1	2	3	4	5	6	7	8	9	0	.	-
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