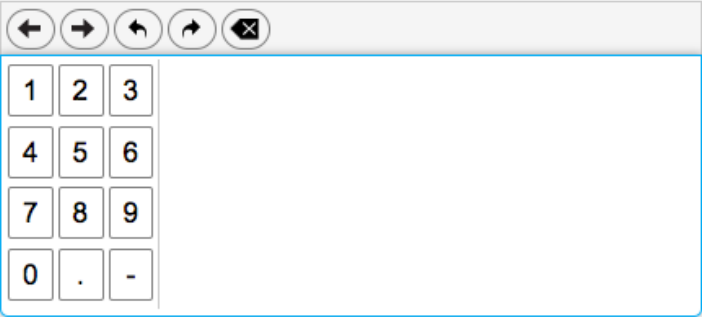


Content Standard	<p>MAFS.8.EE Expressions and Equations</p> <p>MAFS.8.EE.1 Work with radicals and integer exponents.</p> <p>MAFS.8.EE.1.1 Know and apply the properties of integer exponents to generate equivalent numerical expressions. <i>For example, $3^2 \cdot 3^{-5} = 3^{-3} = \frac{1}{3^3} = \frac{1}{27}$.</i></p>	
Assessment Limits	<p>Exponents must be integers. Bases must be whole numbers. Variables may not be used.</p>	
Calculator	No	
Item Types	<p>Equation Editor GRID Matching Item Multiple Choice Multiselect</p>	
Context	No context	
Sample Item		Item Type
Which expression is equivalent to $\frac{1}{27}$?	<p>A. $3^1 \cdot 3^{-10}$ B. $3^{-1} \cdot 3^{10}$ C. $3^{-4} \cdot 3^7$ D. $3^4 \cdot 3^{-7}$</p>	Multiple Choice
Which expression is equivalent to $(4^3)^2 \cdot 4^2$?	<p>A. 4^7 B. 4^8 C. 4^{10} D. 4^{12}</p>	Multiple Choice
Which expression is equivalent to $5^4 \cdot (5^{-3})^2$?	<p>A. 5^1 B. 5^2 C. $\left(\frac{1}{5}\right)^1$ D. $\left(\frac{1}{5}\right)^2$</p>	Multiple Choice

Sample Item	Item Type
<p>An equation is shown.</p> $3^m \cdot 3^n = 3^{-2}$ <p>What are possible values for m and n?</p> <p>$m =$ <input type="text"/></p> <p>$n =$ <input type="text"/></p> 	Equation Editor