

Activity 31 Assessment

Multiplication with 0.01 and 0.1

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<p>Explores and generalizes patterns using place-value relationships.</p> <p style="text-align: center;"> 21×0.01 21×0.1 21×1 21×10 21×100 </p> <p>What patterns do you notice?</p> <p>“I see a growing pattern. The multiplier is 10 times bigger than the previous multiplier each time.”</p>	<p>Uses place-value patterns and multiplication properties to solve equations.</p> <p style="text-align: center;"> $21 \times 0.01 = ?$ $43 \times 0.1 = ?$ </p> <p>“I know that to multiply by 0.01, I move the digits two place-value positions to the right: $21 \times 0.01 = 0.21$. To multiply by 0.1, I move the digits one place-value position to the right: $43 \times 0.1 = 4.3$.”</p>	<p>Uses mental math to solve multiplication problems.</p> <p>Jeremiah wants to add a 20% tip to the bill. Use this equation to calculate how much money Jeremiah will leave as a tip: $\\$48 \times 0.20 = ?$</p> <p>“I know how to multiply by 0.1, so I rewrote the equation as: $\\$48 \times 0.1 \times 2$. $\\$48 \times 0.1 = \\4.80 and $\\$4.80 \times 2 = \\9.60. Jeremiah will leave \$9.60 as a tip.”</p>	<p>Solves multiplication problems flexibly, using a variety of strategies.</p> <p>Determine 4×0.6.</p> <p>“I used doubles: $4 \times 0.6 = 4 \times 0.3 \times 2$ $4 \times 0.3 = 1.2$ $1.2 \times 2 = 2.4$ So, $4 \times 0.6 = 2.4$”</p>
Observations/Documentation			