

Activity 13 Assessment

Dividing Decimals

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<p>Estimates the quotient of two decimals</p> <p>$121.74 \div 4.8$</p> <p>“121.74 is close to 125 and 4.8 is close to 5. I can estimate the quotient as $125 \div 5$, which is 25.”</p>	<p>Divides a decimal by a whole number using a strategy of their choice</p> <p>$16.8 \div 3$</p> <p>“I know how to divide whole numbers, so I’ll calculate $168 \div 3$, which is 56. 16.8 is close to 15 and $15 \div 3$ is 5, so the decimal point belongs between the 5 and 6. $16.8 \div 3 = 5.6$.”</p>	<p>Divides a decimal by a decimal using a strategy of their choice</p> <p>“To calculate $86.32 \div 8.3$, I can multiply each number by 100 to create an equivalent ratio. The calculation becomes $8632 \div 830$. I’ll use an algorithm.</p> $\begin{array}{r} 10.4 \\ 830 \overline{)8632.0} \\ \underline{830} \\ 3320 \\ \underline{3320} \\ 0 \end{array}$ <p>$86.32 \div 8.3 = 10.4$.”</p>	<p>Models and solves applied problems that involve the division of decimals</p> <p>Livio works in a chocolate shop. They have 3.75 kg of chocolates to pack in 0.75 kg boxes. How many boxes can they fill? Will there be any chocolates left over?</p> <p>“I need to divide 3.75 by 0.75. I create an equivalent ratio by multiplying the numbers by 100. The calculation becomes $375 \div 75$. I can use repeated addition to solve this. I know $2 \times 75 = 150$ and $150 + 150 = 300$. That leaves 75 more. So, $375 \div 75 = 2 + 2 + 1 = 5$ Livio can fill 5 boxes. There will be no chocolates left over.”</p>
Observations/Documentation			