

OP I Multiply any fraction by a whole number using models and symbols

Grade	Curriculum Expectations
<b>6</b>	<ul style="list-style-type: none"> <li>• represent, compare, and order fractional amounts with unlike denominators, including proper and improper fractions and mixed numbers, using a variety of tools and using standard fractional notation;</li> </ul>
<b>6</b>	<ul style="list-style-type: none"> <li>• determine and explain, through investigation using concrete materials, drawings, and calculators, the relationships among fractions, decimal numbers, and percents.</li> </ul>
<b>7</b>	<ul style="list-style-type: none"> <li>• use a variety of mental strategies to solve problems involving the addition and subtraction of fractions and decimals;</li> </ul>
<b>7</b>	<ul style="list-style-type: none"> <li>• add and subtract fractions with simple like and unlike denominators, using a variety of tools and algorithms;</li> </ul>
<b>7</b>	<ul style="list-style-type: none"> <li>• demonstrate, using concrete materials, the relationship between the repeated addition of fractions and the multiplication of that fraction by a whole number;</li> </ul>
<b>7</b>	<ul style="list-style-type: none"> <li>• determine, through investigation, the relationships among fractions, decimals, percents, and ratios;</li> </ul>
<b>8</b>	<ul style="list-style-type: none"> <li>• represent, compare, and order rational numbers;</li> </ul>
<b>8</b>	<ul style="list-style-type: none"> <li>• translate between equivalent forms of a number;</li> </ul>
<b>8</b>	<ul style="list-style-type: none"> <li>• use estimation when solving problems involving operations with whole numbers, decimals, percents, integers, and fractions, to help judge the reasonableness of a solution;</li> </ul>
<b>8</b>	<ul style="list-style-type: none"> <li>• represent the multiplication and division of fractions, using a variety of tools and strategies;</li> </ul>
<b>8</b>	<ul style="list-style-type: none"> <li>• solve problems involving addition, subtraction, multiplication, and division with simple fractions.</li> </ul>
<b>9D</b>	<ul style="list-style-type: none"> <li>• simplify numerical expressions involving integers and rational numbers, with and without the use of technology;</li> </ul>
<b>9D</b>	<ul style="list-style-type: none"> <li>• solve problems requiring the manipulation of expressions arising from applications of percent, ratio, rate, and proportion;</li> </ul>
<b>9D</b>	<ul style="list-style-type: none"> <li>• determine, through investigation, various formulas for the slope of a line segment or to determine the slope of a line segment or a line;</li> </ul>
<b>9P</b>	<ul style="list-style-type: none"> <li>• solve problems requiring the expression of percents, fractions, and decimals in their equivalent forms</li> </ul>