Multiplication and Division of Fractions Worksheets

When multiplying fractions, simply multiply the numerators (top number of the fractions) together and multiply the denominators (bottom number of the fractions) together. It is good practice to check to see if any of the numbers can cancel. Canceling is done when the numerator and denominator can be divided *evenly* by the same number.

Note: canceling can happen top-to-bottom and/or diagonally but never across.

Ex. 1: $\frac{1}{2}\times\frac{2}{3}=\frac{2}{6}$ this product can be canceled. Divide the numbers in the fraction by 2 to get the canceled answer $\frac{2\div 2}{6\div 2}=\frac{1}{3}$.

The fractions in Ex. 1 can cancel before they are multiplied.

Ex. 1: $\frac{1}{\cancel{2}_{1}}\times\frac{\cancel{2}^{1}}{3}=\frac{1}{3}$

The 2's cancel by dividing by 2. Cross them out and place 1's close by. Now multiply the top numbers together, then the bottom numbers. The product is the final answer.

Ex. 2: $\frac{35}{40}\times\frac{100}{1000}$ can be rewritten as $\frac{\cancel{35}^{7}}{\cancel{40}_{8}}\times\frac{\cancel{100}^{1}}{\cancel{1000}_{10}}=\frac{7}{8}\times\frac{1}{10}=\frac{7}{80}$

Cancel by dividing by 5. Then cancel by dividing by 100. Multiply and get the product.

Ex. 3: $3\times\frac{1}{3}$ can be written like. $\frac{\cancel{3}^{1}}{1}\times\frac{1}{\cancel{3}_{1}}=\frac{1}{1}=1$ Cancel by dividing by 3. Finally, multiply to find the product.