

# Multiplying Fractions Worksheet

This worksheet is intended for use with the lesson Multiplying Fractions and Mixed Numbers.

Please answer the following questions, showing your work where appropriate. Good luck!

1. Choose a whole number to be your starting number: \_\_\_\_\_
2. Choose a fraction to multiply the number in #1 by: \_\_\_\_\_
3. Will the product (multiplication) of the numbers you chose be larger or smaller than the starting number? \_\_\_\_\_
4. What is the product when the two are multiplied? \_\_\_\_\_  
What is the difference between this product and the starting number?  
Please show your work.
5. What will happen if you multiply the result in #4 by the fraction you chose in #2?  
Will the result be larger or smaller than the starting number? than the result in #4?  
Please explain and show work that supports your conjecture:
6. What is the ratio of the starting number and the result in #4? \_\_\_\_\_  
What is the ratio of the result in #4 and the result in #5? \_\_\_\_\_  
How do the two ratios compare? Please show your work:

7. If you continue to multiply each result by the fraction that you chose in #2, what will happen over time?
  
8. Enter your starting number and multiplier into the computer applet. Look at the numbers that were generated. Were your predictions correct? If not, what was different about the result?
  
9. Try this again with another starting number. Perhaps you would like to try a starting number that is a fraction? What results might that give you? Can you come up with a starting number and a multiplier that give interesting or unexpected results?