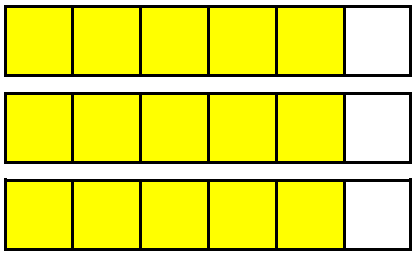
Multiplying Fractions Name_____ Per _____ Notes 7.2 / 7.3

Mrs. Doolan/Math 6

7.2 & 7.3 Multiplying Fractions by Whole Numbers and Multiplying Fractions by Fractions

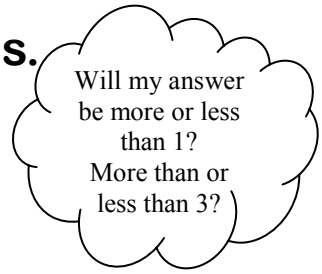
You know how to multiply whole numbers and decimals by each other. Now you'll learn to multiply fractions by whole numbers and other fractions.

How would you find the answer to $3 \times \frac{5}{6}$ **?** $\frac{5}{6} + \frac{5}{6} + \frac{5}{6}$



How many sixths are there?

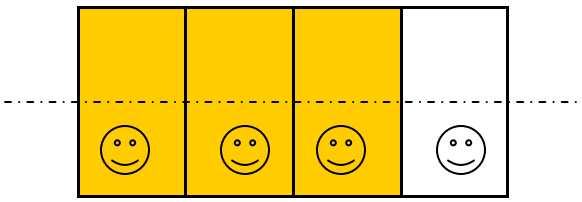
There are _____ sixths.



So... $3 \times \frac{5}{6} = \frac{15}{6}$ **which also =** $2\frac{3}{6} = 2\frac{1}{2}$

How would you find the answer to $\frac{1}{2} \times \frac{3}{4}$ **?**

What is one half *of* three fourths?



Cut this diagram of $\frac{3}{4}$ **in half...what do you get?**

Did you know that to multiply fractions you do *NOT* need common denominators? All you need to do is multiply numerators and denominators and then reduce/simplify?!

Rules for Multiplying Fractions

1. Write all whole numbers and mixed numbers as improper fractions
2. Multiply the numerators
3. Multiply the denominators
4. Simplify your final answer

Ex A $3 \times \frac{1}{4} = \frac{\quad}{\quad} \times \frac{\quad}{\quad} = \frac{\quad\quad}{\quad\quad} =$

Ex B $\frac{2}{3} \times 4 = \frac{\quad}{\quad} \times \frac{\quad}{\quad} = \frac{\quad\quad}{\quad\quad} =$

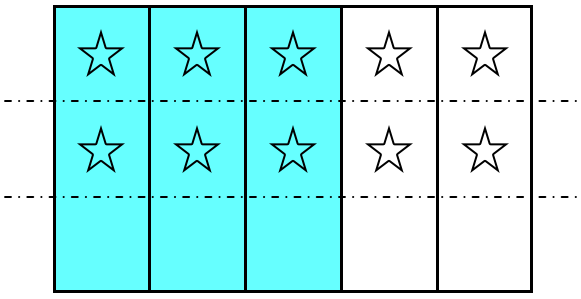
Ex C $4 \times 5\frac{3}{4} = \frac{\quad}{\quad} \times \frac{\quad}{\quad} = \frac{\quad\quad}{\quad\quad} =$

Ex D $2\frac{3}{5} \times \frac{7}{8} = \frac{\quad}{\quad} \times \frac{\quad}{\quad} = \frac{\quad\quad}{\quad\quad} =$

Ex E $\frac{2}{3} \times \frac{3}{4} = \frac{\quad\quad}{\quad\quad} =$

Ex F $3\frac{1}{2} \times 1\frac{1}{2} = \frac{\quad\quad}{\quad\quad} =$

What multiplication problem is this a model of?



And what is the answer?

Could you draw your own model of the product of two fractions?