

Modeling Fraction Multiplication

Steps to Model Multiplication of Fractions:

1. Look at the whole number for the number of objects to start with.
2. Look at the denominator of the fraction for how many sets to divide the whole number into.
3. Look at the numerator of the fraction for how many of those sets should be circled or colored.
4. Look at the total number of objects in each set for the solution.

Example:

$$\frac{2}{6} \text{ of } 12$$

1. There should be 12 objects, since 12 is the whole number.
2. Divide the 12 objects into 6 equal sets (2 objects in each set) because 6 is the denominator.
3. Circle 2 of the sets, because 2 is the numerator.
4. There are 4 objects in the 2 sets, so the answer is 4.



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Solve each problem using models/pictures.

1. $\frac{1}{4}$ of 8

2. $\frac{2}{5}$ of 10

3. $\frac{4}{5}$ of 15

4. $\frac{2}{6}$ of 12

5. $\frac{3}{9}$ of 9

6. $\frac{2}{3}$ of 12

Do you recognize a pattern to solving these problems?
See if you can find another way to solve the problems.
Explain your method on the back of the paper.
Rework all 6 problems using your method.