

## Multiply Fractions and Whole Numbers

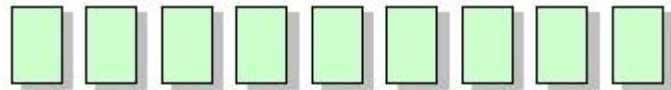
Hisham has 9 baseball cards. He gave  $\frac{2}{3}$  of them to his friend Nader.  
How many baseball cards did he give to Nader?

You can answer the question by multiplying  $\frac{2}{3} \times 9$ .

To multiply a fraction with a whole number you can use a model:

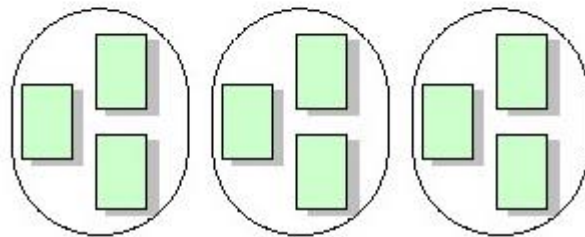
### STEP 1

Draw 9 rectangles to show the cards.



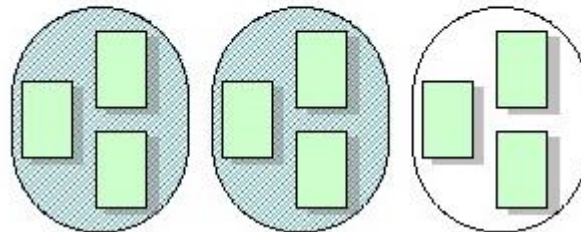
### STEP 2

The denominator of the fraction  $\frac{2}{3}$  is 3. This means there are 3 equal parts, so divide the rectangles into 3 equal groups.



### STEP 3

The numerator of the fraction  $\frac{2}{3}$  is 2. This means there are 2 parts given, so shade 2 of the groups.



### STEP 4

Count the shaded rectangles, or cards. There are 6 cards.

So,  $\frac{2}{3} \times 9 = 6$

**Examples:****A- Find the product.**

$$\begin{array}{r} 1) \ 3 \times \underline{2} \\ \quad 5 \\ \hline 3 \times 2 \\ \quad 5 \end{array}$$

$$\begin{array}{r} 2) \ 5 \times \underline{3} \\ \quad 8 \\ \hline 5 \times 3 \\ \quad 8 \end{array}$$

$$\begin{array}{r} 3) \ \underline{11} \times \underline{1} \\ \quad 9 \\ \hline \underline{11} \times \underline{1} \\ \quad 9 \end{array}$$

$$\begin{array}{r} 4) \ 16 \times \underline{4} \\ \quad 15 \\ \hline 16 \times 4 \\ \quad 15 \end{array}$$

$$\begin{array}{r} \underline{6} \\ 5 \end{array}$$

$$\begin{array}{r} \underline{15} \\ 8 \end{array}$$

$$\begin{array}{r} \underline{11} \\ 9 \end{array}$$

$$\begin{array}{r} \underline{64} \\ 15 \end{array}$$

**My Real Life**

Daisie has 12 picture frames. She gave 3 to her friends. How many frames did she give?  
6

$$12 \times \underline{3} = 6 \text{ picture frames}$$

6

