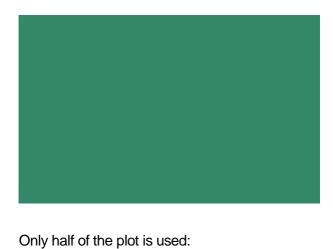
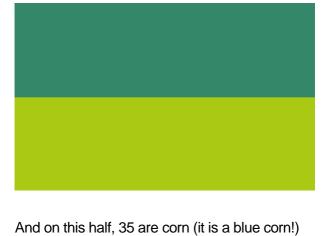
We start by posing a problem: The Sangakoo family has a rectangular plot of land. Only half of the plot is used, and the three fourths of the harvest is corn. We want to know what part of the entire surface of the plot is cultivated by corn.

Let's consider a rectangular plot:







represents 310 of the whole plot. fraction 310 is the result The of

multiplying 12 by 35. The product of two fractions is another fraction

which numerator is the product of the numerators of the given fractions, and its denominator is the product of its denominators. Let's see an example:

The product  $\frac{1}{2} \cdot \frac{3}{5}$  is calculated by m  $\frac{1}{2} \cdot \frac{3}{5} = \frac{1 \cdot 3}{2 \cdot 5} = \frac{3}{10}$ 

This can be written according to the following formula:  $\frac{a}{b} \cdot \frac{c}{d} = \frac{a \cdot c}{b \cdot d}$ 

is done in the same way.

 $7 \cdot \frac{3}{4} = \frac{7}{1} \cdot \frac{3}{4} = \frac{7 \cdot 3}{1 \cdot 4} = \frac{21}{4}$ 

When the numerator and the denominator of the operation, it is possible to eliminate it from both positions since the actions of multiplying and dividing by the same number are annulled mutually.

$$\frac{1}{2} \cdot \frac{2}{5} = \frac{1 \cdot 2}{2 \cdot 5} = \frac{1}{5}$$

Properties of the product of fractions

The multiplication of fractions has the following properties: 1. Commutative property: if  $\frac{a}{b}$  and  $\frac{c}{d}$  are any two fractions, it is satisfied that:  $\frac{a}{b}\cdot\frac{c}{d}=\frac{c}{d}\cdot\frac{a}{b}$ 

$$\frac{a}{b}\cdot\frac{c}{d}=\frac{c}{d}\cdot\frac{a}{b}$$
 Namely, changing the order of the factors, the result is not modified.

2. Associative property: if  $\frac{a}{h}$ ,  $\frac{c}{d}$  and  $\frac{n}{m}$  are any three fractions, it is

$$\left(\frac{a}{b} \cdot \frac{c}{d}\right) \cdot \frac{n}{m} = \frac{a}{b} \cdot \left(\frac{c}{d} \cdot \frac{n}{m}\right)$$

fraction:  $1=rac{1}{1}=rac{a}{a}$  , for any integer a
eq 0 , and it is satisifed that

$$\frac{a}{b} \cdot 1 = 1 \cdot \frac{a}{b} = \frac{a}{b}$$