whole number: a number that is 0 or greater   **unit fraction:** a fraction with a numerator of **1**

Dividing Whole Numbers by Unit Fractions

Before you begin, convert the whole number into a fraction. To do this, make the whole number the numerator of a fraction. Make the denominator 1.
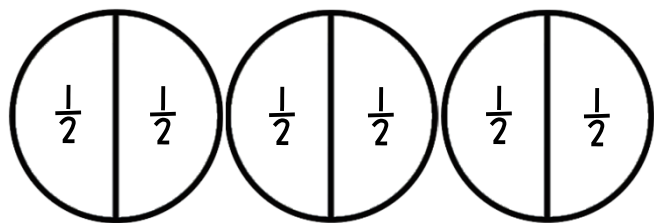
$$4 = \frac{4}{1}$$

WHAT DOES IT MEAN TO DIVIDE A WHOLE NUMBER BY A FRACTION?

$$3 \div \frac{1}{2} = 6$$

"How many 1/2s are there in 3 wholes?"

Divide **3** pizzas into $\frac{1}{2}$ equal parts!

$\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$

There are <u>six</u> 1/2s in 3 wholes.

K C F M
KEEP   CHANGE   FLIP   MULTIPLY

$$3 \div \frac{1}{2}$$

$$\frac{3}{1} \div \frac{1}{2}$$

$$\frac{3}{1} \times \frac{2}{1} \underset{(1 \times 1)}{\overset{(3 \times 2)}{=}} \frac{6}{1} = 6$$

Put the whole number over 1.

Then, use the same steps you use when dividing fractions by fractions...

KEEP the first fraction the same
CHANGE the sign from ÷ to x
FLIP the second fraction
MULTIPLY straight across

Simplify, if needed.
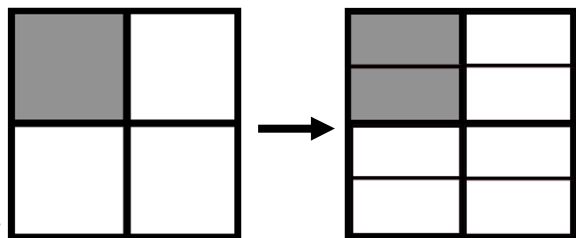
Dividing Unit Fractions by Whole Numbers

WHAT DOES IT MEAN TO DIVIDE A FRACTION BY A WHOLE NUMBER?

$$\frac{1}{4} \div 2 = \frac{1}{8}$$

"1/4 divided into 2 equal parts."

Divide $\frac{1}{4}$ of the cake into 2 equal parts.

Now you have a cake cut into 1/8s!

K C F M
KEEP   CHANGE   FLIP   MULTIPLY

$$\frac{1}{4} \div 2$$

$$\frac{1}{4} \div \frac{2}{1}$$

$$\frac{1}{4} \times \frac{1}{2} \underset{(4 \times 2)}{\overset{(1 \times 1)}{=}} \frac{1}{8}$$

Put the whole number over 1.

KEEP the first fraction the same
CHANGE the sign from ÷ to x
FLIP the second fraction
MULTIPLY straight across

Simplify, if needed.