Multiplying Fractions



- -When multiplying fractions, you simply multiply across.
- -First, you multiply the numerators.
- -Next, you multiply the denominators.
- -Finally, you reduce the fraction if neccessary.

Example:
$$\frac{4}{5} \times \frac{2}{8} = ?$$

$$\frac{\text{multiply}}{\text{numerators}} \frac{4 \times 2}{5 \times 8} = \frac{8}{40} = \frac{1}{5}$$

$$\begin{array}{ccc} & & X & \longleftarrow & \text{numerator} \\ & & - & \\ & & Y & \longleftarrow & \text{denominator} \end{array}$$

For each problem below, follow the steps used in the example to find your solution. Be sure to reduce your fraction to its lowest terms.

1)
$$\frac{3}{6} \times \frac{3}{2} = ?$$

$$5)\frac{20}{40} \times \frac{2}{2} = ?$$

2)
$$\frac{4}{7} \times \frac{5}{8} = ?$$

6)
$$\frac{2}{6} \times \frac{6}{2} = ?$$

$$3)\frac{5}{10} \times \frac{2}{1} = ?$$

$$7)\frac{5}{25} \times \frac{4}{1} = ?$$

$$4)\frac{15}{17} \times \frac{6}{6} = ?$$

8)
$$\frac{9}{9}$$
 x $\frac{1}{1}$ = ?

Multiplying Fractions

Multiplying fractions by a whole number is very similar to multiplying two fractions. Follow the steps below to find out how.



- -First, make the whole number a fraction by putting it over 1.
- Second, multiply the top numbers, or the numerators.
 - -Next, multiply the bottom numbers, or the *denominators*.
 - -Last, simplify your fraction if neccessary.

Example: $\frac{2}{3} \times 5 = ?$

make the whole number a fraction

multiply the top numbers (numerators) $2 \times 5 = 10$ multiply the bottom numbers $3 \times 1 = 3$ write your result $\frac{10}{3}$

For each problem below, follow the steps used in the example to find your solution. Be sure to reduce your fraction to its lowest terms.

1)
$$3 \times \frac{2}{9} = ?$$

5)
$$4 \times \frac{3}{15} = ?$$

2)
$$2 \times \frac{9}{19} = ?$$

6)
$$6 \times \frac{3}{24} = ?$$

3)
$$2 \times \frac{2}{5} = ?$$

7)
$$1 \times \frac{5}{5} = ?$$

4)
$$5 \times \frac{1}{7} = ?$$

8)
$$10 \times \frac{1}{16} = ?$$