

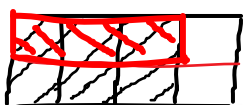
**GRADE 10 ESSENTIAL
UNIT X – FRACTIONS
MULTIPLY FRACTIONS**

Name: _____
Date: _____

LESSON 10 – MULTIPLY FRACTIONS

Multiplying fractions is very straight forward.

$$\begin{aligned} \frac{1}{2} \times \frac{3}{4} &= \frac{1 \times 3}{2 \times 4} \\ &= \frac{3}{8} \end{aligned}$$



Is $\frac{3}{8}$ in simplest form? Yes!
No common factors

$$\begin{aligned} \frac{4}{5} \times \frac{1}{6} &= \frac{4 \times 1}{5 \times 6} = \frac{4 \div 2}{30 \div 2} = \frac{2}{15} \\ &= \frac{4}{30} \longrightarrow \frac{4}{30} = \frac{4 \div 2}{30 \div 2} \\ &= \frac{2}{15} \longleftarrow = \frac{2}{15} \end{aligned}$$

Is $\frac{4}{30}$ in simplest form? No
Is $\frac{2}{15}$ in simplest form? Yes

Write each answer in simplest (reduced) form:

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

$$\frac{2}{3} \times \frac{4}{5}$$

$$\frac{2}{3} \times \frac{2}{3} = \frac{4}{9}$$

$$\frac{3}{4} \times \frac{4}{5} = \frac{12 \div 4}{20 \div 4} = \frac{3}{5}$$

$$\frac{5}{6} \times \frac{2}{3}$$

$$\frac{6}{7} \times \frac{2}{3}$$

$$\frac{5}{6} \times \frac{2}{5}$$

$$\frac{4}{5} \times \frac{5}{6}$$

$$\frac{3}{8} \times \frac{2}{3}$$

$$\frac{6}{5} \times \frac{3}{8}$$

$$\frac{9}{10} \times \frac{5}{12}$$

$$\frac{8}{9} \times \frac{3}{10}$$

$$\frac{4}{7} \times \frac{5}{6}$$

$$\frac{3}{8} \times \frac{7}{10}$$

$$\frac{9}{10} \times \frac{5}{9}$$

Problem Solve:

MrF

of = multiply

1. The Urbans had $\frac{3}{4}$ of a jug of milk. One-half of this was used for dinner. How much milk was used for dinner? ($\frac{1}{2}$ of $\frac{3}{4} = \frac{1}{2} \times \frac{3}{4}$) They drank $\frac{3}{8}$ th of a whole jug.

$\frac{3}{8}$ th of a jug was used for dinner.

1.

$$\frac{1}{2} \times \frac{3}{4} = \frac{3}{8}$$



2. Keara read $\frac{4}{5}$ of a book. Two-thirds of that reading was done at school. How much of the book did she read at school?

She read _____ of the book at school.

2.

 $\frac{8}{15}$

3. Tricia lives $\frac{4}{5}$ of a block from work. One morning she sprinted $\frac{1}{2}$ of the distance to work because she was late. How far did Tricia sprint?

Tricia sprinted _____ block.

3.

 $\frac{2}{5}$

4. Three fourths of a room has been painted. Joseph did $\frac{2}{3}$ of the painting. How much of the room did Joseph paint?

Joseph painted _____ of the room.

4.

 $\frac{1}{2}$

5. A truck was carrying $\frac{3}{4}$ load of sand. One-third of the sand was put into barrels. How much sand was put into barrels?

_____ load of sand was put into barrels.

5.

6. Carrie cut $\frac{2}{3}$ of a metre of rope. Then she cut $\frac{1}{2}$ of that piece. How much of the metre of rope was her second piece?

It was _____ of a metre.

6.

7. One fourth of the people in the room have blue eyes. Two thirds of the blue-eyed people have blond hair. What part of the people in the room have blond hair and blue eyes?

_____ have blond hair and blue eyes.

7.