المدرسة
الوطنية الأرثوذكسية
الشميساني

The National
Orthodox School
Shmaisani

Worksheet (6) |

1st Semester | 2023-2024

Subject: Math

Name: _____

Objectives:

• **To Multiply and divide fractions and mixed numbers.**

Chapter: 6 (Fractions)

Grade 6 CS

Multiplying fractions

Here, **no need** to make same denominators:

1) Multiply the numerators.

2) Multiply the denominators.

3) Simplify (if needed).

Example:

$$\frac{3}{4} \times \frac{5}{6} = \frac{15 \div 3}{24 \div 3} = \frac{5}{8}$$

If you have <u>large numbers</u>, you can **simplify first** then multiply.

Example:

$$\frac{16}{21} \times \frac{49}{64}$$

$$\frac{\overset{1}{\cancel{16}}^{\div 16}}{\underset{3}{\cancel{21}}_{\div 7}} \times \frac{\overset{7}{\cancel{49}}^{\div 7}}{\underset{4}{\cancel{64}}_{\div 16}} = \frac{7}{12}$$

Dividing fractions

Follow the following steps:

> **Change** the **division** to **multiplication**.

> **Turn** the **second** fraction **upside down.**

> Multiply the top numbers and the bottom

numbers.

> Simplify the fraction (if needed)

Remember Keep change flip

Exercise (1): Workout.

1) $\frac{10}{25}$ x $\frac{14}{21}$

2) 6 x $\frac{9}{11}$

3) $\frac{33}{65}$ x $\frac{15}{27}$

4) $\frac{3}{8}$ x 12

5) $\frac{4}{21}$ x $\frac{48}{56}$

6) $2\frac{6}{7}$ x $3\frac{2}{5}$

7) $4\frac{3}{6}$ x $5\frac{3}{9}$

8) $5\frac{1}{4}$ x $2\frac{2}{3}$

9) $\frac{16}{44} \times \frac{18}{36}$

10) $7 \times \frac{11}{15}$

Exercise (2): Work out.

1) $\frac{29}{5} \div 9\frac{1}{2} =$	2) $8\frac{2}{3} \div 7\frac{1}{2} =$	3) $2 \div \frac{2}{4} =$
4) $\frac{3}{4} \div \frac{3}{5} =$	5) $\frac{7}{3} \div 14 =$	6) $\frac{17}{2} \div \frac{14}{3} =$
7) $\frac{23}{3} \div 6\frac{2}{5} =$	8) $\frac{1}{3} \div \frac{1}{4} =$	9) $\frac{23}{3} \div \frac{11}{2} =$

Word problems.

Problem 1:

There are 24 students in Justin's class. $\frac{1}{4}$ **of** the students go to the museum and $\frac{2}{3}$ **of** the students go to the theme park. How many students don't go on a trip?

Problem 2:

A mouse eats $\frac{2}{15}$ kg of cheese each night.

How much cheese does it eat in

a) 30 nights   b) 16 nights