MATHEMATICS 5

Modified In-School Off-School Approach Modules (MISOSA)

Distance Education for Elementary Schools

SELF-INSTRUCTIONAL MATERIALS

FRACTIONS IN LOWEST TERMS

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FRACTIONS IN LOWEST TERMS

Objective: Change fractions to lowest terms

Review

Match the numbers in Column A with the greatest common factor of the two numbers found in Column B.

A	B
1) 24 and 20	a. 8
2) 30 and 36	b. 4
3) 45 and 50	c. 7
4) 21 and 35	d. 5
5) 16 and 40	e. 6

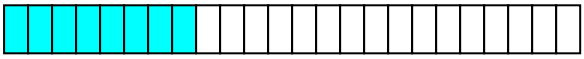
Study and Learn

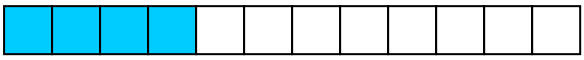
Study the problem below.

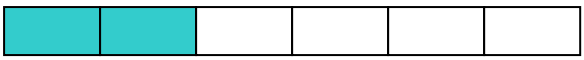
Sleep is an important part of a good fitness plan. Therese Marie sleeps 8 hours or $\frac{8}{24}$ in a day.

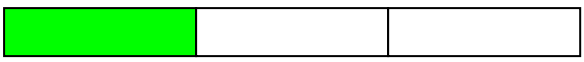
What other fraction is equivalent to $\frac{8}{24}$?

Look at the strips of paper that show the fraction in its lowest term.

$\frac{8}{24}$ 

$\frac{4}{12}$ 

$\frac{2}{6}$ 

$\frac{1}{3}$ 

Among the fractions presented in the fraction strips, what is the lowest terms or simplest form of $\frac{8}{24}$?

The simplest form of $\frac{8}{24}$ *is* $\frac{1}{3}$.

So, Therese Marie sleeps $\frac{1}{3}$ of the day.

You can find the simplest form of a fraction by dividing the numerator and the denominator by the greatest common factor (GCF).

$$\frac{8 \div 8}{24 \div 8} = \frac{1}{3}$$

Why is $\frac{1}{3}$ considered to be in simplest form? *The numerator is 1 and both the numerator and denominator have no common factor except one.*

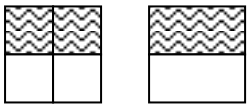
Let's try other examples:

$$\frac{3}{15} = \frac{3 \div 3}{15 \div 3} = \frac{1}{5}$$

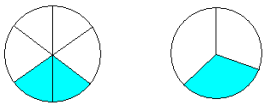
$$\frac{4}{6} = \frac{4 \div 2}{6 \div 2} = \frac{2}{3}$$

Try These

Use the illustrations to complete the following:

1) 

$\frac{2}{4} = \frac{\_}{2}$

2) 

$\frac{2}{6} = \frac{\_}{\_}$

3) 

$\frac{2}{8} = \frac{\_}{\_}$

Wrap Up

A fraction is in simplest form when the numerator and denominator have no common factor other than 1.
You can find the simplest form of a fraction by dividing the numerator and the denominator by their greatest common factor.

On Your Own

Write each fraction in simplest form.

1) $\frac{8}{18}$ 2) $\frac{12}{36}$ 3) $\frac{10}{24}$ 4) $\frac{6}{10}$ 5) $\frac{14}{16}$

6) $\frac{5}{30}$ 7) $\frac{8}{26}$ 8) $\frac{13}{26}$ 9) $\frac{18}{36}$ 10) $\frac{25}{100}$

Check your answer with the answer key. If you get…

8-10	Excellent! You may now proceed to the next lesson.
5-7	You need to review the process you missed.
0-4	You need to repeat the whole process. Ask your teacher or elder to help you.

Key to Correction
FRACTIONS IN LOWEST TERMS

REVIEW

1) b
2) e
3) d
4) c
5) a

TRY THESE

1) $\frac{1}{2}$
2) $\frac{1}{3}$
3) $\frac{1}{4}$

ON YOUR OWN

1) $\frac{4}{9}$
2) $\frac{1}{3}$
3) $\frac{5}{12}$
4) $\frac{3}{5}$
5) $\frac{7}{8}$
6) $\frac{1}{6}$
7) $\frac{4}{13}$
8) $\frac{1}{2}$
9) $\frac{1}{2}$
10) $\frac{1}{4}$