

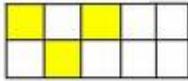
Concept: Improper Fractions and Mixed Numbers

Name: _____

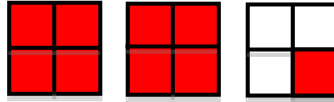
Warm Up:

1. Write a fraction to represent the shaded part. *Write your final answer in lowest terms.*

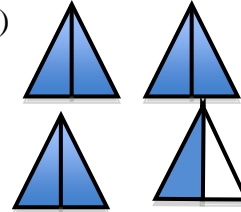
(a)



(b)



(c)



COMPUTER COMPONENT

Instructions:

In follow the **Content Menu** path:

Fractions > Improper Fractions and Mixed Numbers



Work through all Sub Lessons of the following Lessons **in order**:

- *The Concept ... Packages*
- *The Concept ... Clock*
- *Improper Fractions and Mixed Numbers ... What are they?*
- *The Concept... Cubes*
- *Introductory Problem*
- *Toothpicks and paperclips*
- *Mixed to Improper*
- *Improper to Mixed*
- *Adding Mixed Numbers*
- *Subtracting Mixed Numbers*
- *Multiplying Mixed Numbers*
- *Dividing Mixed Numbers*
- *Fraction Card Game*



As you work through the computer exercises, you will be prompted to make notes in your notebook/math journal.

NOTES

A *mixed number* has a _____ number and a _____.

An *improper fraction* has a _____ which is larger than the

_____.

1. Classify the following as either *mixed numbers* (M) or *improper fractions* (I).

$$\frac{11}{7} \text{ —————} \quad 2\frac{3}{4} \text{ —————} \quad 8\frac{2}{4} \text{ —————} \quad 11\frac{1}{7} \text{ —————} \quad \frac{8}{3} \text{ —————}$$

2. Converting *mixed numbers* to *improper fractions*.

Example 1: $2\frac{3}{4} =$

	<u>Method 1</u>	<u>Method 2</u>

3. Converting *improper fractions* to *mixed numbers*.

Example 2: $\frac{11}{4} =$

	<u>Method 1</u>	<u>Method 2</u>

4. How to add *mixed numbers*.

$$2\frac{1}{2} + 1\frac{3}{4} =$$

	<u>Method 1</u>	<u>Method 2</u>

5. How to subtract *mixed numbers*.

$$3\frac{2}{5} - 1\frac{1}{3} =$$

Method 1

Method 2

6. How to multiply *mixed numbers*.

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

How to divide *mixed numbers*.

$$2\frac{2}{3} \div 1\frac{1}{5} =$$

OFF COMPUTER EXERCISES

1. Change from a *mixed number* to an *improper fraction* (in lowest terms).

(a) $2\frac{3}{8} =$

(b) $9\frac{5}{6} =$

(c) $16\frac{2}{3} =$

2. Change from an *improper fraction* to a *mixed number* (in lowest terms).

(a) $\frac{42}{4} =$

(b) $\frac{33}{5} =$

(c) $\frac{108}{84} =$

3. Addition and subtraction of *mixed fractions*.

Simplify the following.

(a) $2\frac{2}{3} + 1\frac{7}{12} =$

(b) $3\frac{5}{6} - 1\frac{1}{4} =$

(c) $8\frac{7}{10} - 4\frac{1}{4} =$

(d) $\frac{4}{7} + 3\frac{1}{5} =$

4. Multiplication and division of *mixed fractions*.

Simplify the following.

(a) $\frac{5}{12} \times 7\frac{1}{5} =$

(b) $3\frac{5}{8} \div \frac{3}{4} =$

(c) $3\frac{3}{5} \times 4\frac{1}{2} =$

(d) $9 \div 2\frac{3}{4} =$

5. Simplify the following. *Watch the signs.*

(a) $2\frac{1}{2} \div 3\frac{1}{7} =$

(b) $2\frac{3}{4} + 2\frac{5}{9} =$

$$(c) 5\frac{2}{3} - 1\frac{2}{15} =$$

$$(d) 4\frac{7}{8} \times 5 =$$

$$(e) 1\frac{3}{4} - \frac{1}{8} \div 1\frac{1}{3} =$$

$$(f) 1\frac{1}{4} \div 7\frac{1}{2} + 2\frac{1}{4} \times 1\frac{1}{3} =$$