

Concept: Improper Fractions and Mixed Numbers

Name: _____

COMPUTER COMPONENT

Instructions: Select the computer program *Understanding Fractions* (Neufeld)
Follow the instructions to the Main Menu.
Select *Improper Fractions and Mixed Numbers* from the Main Menu.



Work through all sections of this topic **in order**:

- *The Concept ... Packages*
- *The Concept ... Clocks*
- *Improper Fractions and Mixed Numbers ... What are they?*
- *Introductory Problem*
- *Mixed to Improper*
- *Improper to Mixed*
- *Adding Mixed Numbers*
- *Subtracting Mixed Numbers*
- *Multiplying Mixed Numbers*
- *Dividing Mixed Numbers*
- *Fraction Card Game*
- *Practice Questions*



As you work through the computer exercises, make your own notes in the blanks provided.

When you reach the end of the section *Practice Questions* on the computer, move on to the **WORKSHEET** portion of this handout.

YOUR NOTES

→ *Improper Fractions and Mixed Numbers ... What are they?*

A mixed number has a _____ number and a _____.

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

→ **Mixed to Improper**

example 2: $2\frac{3}{4} =$

method 1:

method 2:

→ **Improper to Mixed**

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

→ **Adding Mixed Numbers**

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

method 1:

method 2:

→ **Subtracting Mixed Numbers**

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

method 1:

method 2:

→ **Multiplying Mixed Numbers**

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

→ **Dividing Mixed Numbers**

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

WORKSHEET

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. Simplify.

(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. Simplify.

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

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

4. (continued)

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

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

5. Simplify. 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) $\left(1\frac{3}{4} - \frac{1}{8}\right) \div 1\frac{1}{3} =$

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