inclass notes 9/30

Improper Fractions and Mixed Numbers

*divide the numerator by the denominator

Convert to mixed numbers

1) $\frac{11}{2} = 5\frac{1}{2}$ *

$$\begin{array}{r} 5\ R1 \\ 2\overline{)11} \\ -10 \\ \hline 1 \end{array}$$

2) $\frac{36}{5} = 7\frac{1}{5}$

$$\begin{array}{r} 7\ R1 \\ 5\overline{)36} \\ -35 \\ \hline 1 \end{array}$$

3) $\frac{24}{3} = 8$

$$\begin{array}{r} 8 \\ 3\overline{)24} \\ 24 \\ \hline 0 \end{array}$$

4) $\frac{71}{8} = 8\frac{7}{8}$

$$\begin{array}{r} 8\ R7 \\ 8\overline{)71} \\ -64 \\ \hline 7 \end{array}$$

5) $\frac{13}{10} = 1\frac{3}{10}$

$$\begin{array}{r} 1\ R3 \\ 10\overline{)13} \\ -10 \\ \hline 3 \end{array}$$

* the remainder is your new numerator. The denominator STAYS the SAME!

Convert to improper fractions

6) $2\frac{3}{8} = \frac{19}{8}$ (+3, ×8)

7) $4\frac{5}{6} = \frac{29}{6}$ (+5, ×6)

8) $3\frac{1}{3} = \frac{10}{3}$ (+1, ×3)

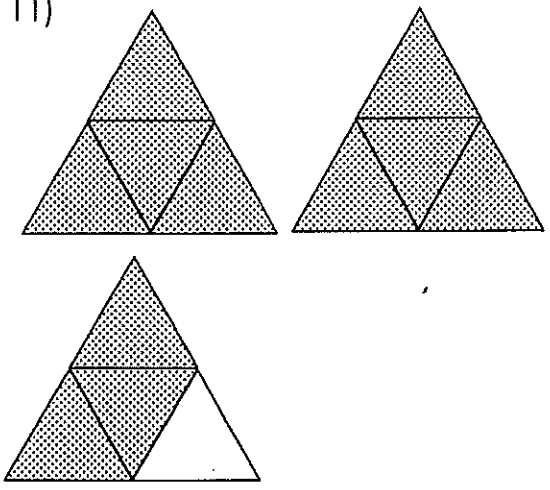
9) $6\frac{1}{4} = \frac{25}{4}$ (+1, ×4)

10) $1\frac{4}{5} = \frac{9}{5}$ (+4, ×5)

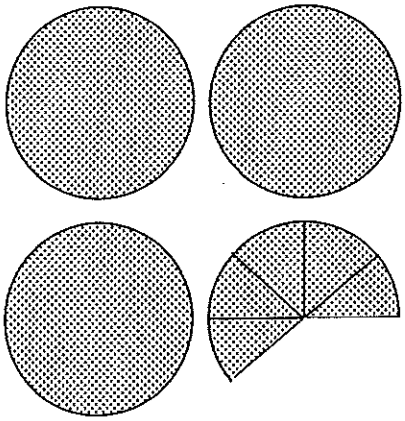
* multiply the denominator by the whole number then add the numerator. This becomes your NEW numerator. The denominator stays the same.

Write the mixed number and improper fraction represented by the shaded area.

11)



12)



Fill in with > < or = *must be in the same form to compare!

13) $2\frac{3}{5} \bigcirc \frac{7}{5}$

14) $\frac{9}{4} \bigcirc 1\frac{3}{4}$

15) $7\frac{7}{8} \bigcirc \frac{63}{8}$

Homework 9/30

Improper Fractions and Mixed Numbers Notes

Improper fraction-a fraction where the **numerator** is larger than the **denominator**. It means that this amount is more than one whole group....ALWAYS!!!

Mixed Number-a number that consists of a **whole number** and a **fraction**

~ ~

Converting from an Improper Fraction to a Mixed Number
Put the numerator into groups by dividing the numerator by the denominator.

Change to mixed numbers

$\frac{9}{4}$ $\frac{15}{2}$ $\frac{10}{3}$ $\frac{7}{5}$ $\frac{12}{4}$ $\frac{21}{8}$

~ ~

Converting from a Mixed Number to an Improper Fraction
Think about how many parts you have. Change the whole number into parts and combine them with the fractional part.

Mix it ↑

Change to improper fractions

$2\frac{1}{4}$ $4\frac{2}{5}$ $5\frac{7}{8}$ $1\frac{1}{2}$ $3\frac{1}{8}$

Fill in the missing sections of the table:

Improper Fraction	Mixed Number
$\frac{14}{3}$	
$\frac{7}{2}$	
	$8\frac{1}{2}$
	$1\frac{3}{5}$
$\frac{29}{4}$	
	$10\frac{3}{4}$