Fractions Review

PART 1

Equivalent Fractions

- made by multiplying or dividing the numerator and denominator by the same number

ie $4/6 = \frac{4\div2}{6\div2} = \boxed{2/3}$ → this fraction is in lowest terms

$4/6 = \frac{4\times4}{6\times4} = 16/24$

Reduce the following fractions into LOWEST TERMS

$\frac{50}{90} =$ ____ $\frac{16}{20} =$ ____ $\frac{7}{42} =$ ____

$\frac{8}{32} =$ ____ $\frac{27}{54} =$ ____ $\frac{70}{84} =$ ____

$\frac{5}{10} =$ ____ $\frac{48}{56} =$ ____ $\frac{16}{32} =$ ____

$\frac{35}{84} =$ ____ $\frac{14}{49} =$ ____ $\frac{10}{15} =$ ____

PART 2

Mixed ⟷ Improper

ex. $7/4 = 1\,3/7$

1 → whole #

4) 7

denominator → 4

3 → numerator

ex. $3\,4/5$ → $\frac{3\times5+4}{5}$ = $19/5$

* note: denominators NEVER Change *

Convert the following improper fractions to mixed numbers

$\frac{12}{5} =$ ____ $\frac{37}{11} =$ ____ $\frac{18}{7} =$ ____

$\frac{27}{4} =$ ____ $\frac{34}{9} =$ ____ $\frac{46}{7} =$ ____

Convert the following mixed numbers to improper fractions

$4\frac{1}{2} =$ ____ $2\frac{1}{2} =$ ____ $6\frac{7}{12} =$ ____

$4\frac{1}{6} =$ ____ $4\frac{5}{6} =$ ____ $9\frac{1}{3} =$ ____

PART 3

Adding Fractions

$7/8 + 3/4$ — step 1: Find LCD — (8) 16, 24, 32; 4, (8)

$= 7/8 + 6/8$ — step 2: Make equivalent fractions using LCD

$= 13/8$ — step 3: add numerators

$= 1\,5/8$

Subtracting Fractions

* Same as addition, but you subtract *

ex. $2/3 - 1/8$

$16/24 - 3/24$

$13/24$

- mixed Number subtraction

ex. $2\,1/5 - 1\,3/10$

option 1: change to improper

$11/5 - 13/10$

$22/10 - 13/10$

$9/10$

Option 2: Borrow

$2\,1/5 - 1\,3/10$

$1\,6/5 - 1\,3/10$

$1\,12/10 - 1\,3/10$

$9/10$

Solve the following:

1) $\frac{3}{4} + \frac{2}{5}$

2) $1 + \frac{9}{5}$

3) $\frac{13}{7} + \frac{3}{2}$

4) $\frac{5}{8} - \frac{1}{7}$

5) $1 + \frac{3}{7}$

6) $\frac{1}{7} + \frac{3}{2}$

7) $\frac{4}{5} + \frac{9}{7}$

8) $\frac{5}{4} + \frac{1}{2}$

9) $\frac{7}{4} + \frac{5}{8}$

10) $7 - \frac{1}{4}$