Name: _____

Adding Mixed Numbers

With Different Denominators and Improper Fractions

Step 1: Find the Least Common Denominator (LCD).

$4\frac{3}{4}$
$+\ 1\frac{7}{8}$ > LCD = 8

Step 2: Using the LCD, find equivilent fractions.

$4\frac{3}{4} = 4\frac{6}{8}$
$+\ 1\frac{7}{8} = +\ 1\frac{7}{8}$

Step 3: Add the fractions.

$4\frac{3}{4} = 4\frac{6}{8}$
$+\ 1\frac{7}{8} = +\ 1\frac{7}{8}$
$\frac{13}{8}$

Step 4: Add the whole numbers.

$4\frac{3}{4} = 4\frac{6}{8}$
$+\ 1\frac{7}{8} = +\ 1\frac{7}{8}$
$5\frac{13}{8}$

Step 5: Change improper fraction answers to mixed numbers.

$5\frac{13}{8} - \frac{8}{8} = 6\frac{5}{8}$

Solve and simplify your answer.

a. $6\frac{3}{8}$ **b.** $8\frac{1}{2}$ **c.** $3\frac{7}{10}$ **d.** $7\frac{8}{9}$

i. $6\frac{3}{4} + 3\frac{4}{5}$

j. $7\frac{1}{3} + 7\frac{7}{9}$

k. $4\frac{6}{7} + 3\frac{5}{14}$

l. $8\frac{5}{12} + \frac{3}{4}$

m. $2\frac{7}{5} + 3\frac{2}{10}$

n. $2\frac{5}{4} + 2\frac{3}{8}$

o. $1\frac{1}{2} + \frac{8}{6}$

p. $8\frac{8}{7} + 3\frac{4}{3}$

ANSWER KEY

Adding Mixed Numbers

With Different Denominators and Improper Fractions

Step 1: Find the Least Common Denominator (LCD).

$4\frac{3}{4}$
$+\ 1\frac{7}{8}$ > LCD = 8

Step 2: Using the LCD, find equivilent fractions.

$4\frac{3}{4} = 4\frac{6}{8}$
$+\ 1\frac{7}{8} = +\ 1\frac{7}{8}$

Step 3: Add the fractions.

$4\frac{3}{4} = 4\frac{6}{8}$
$+\ 1\frac{7}{8} = +\ 1\frac{7}{8}$
$\frac{13}{8}$

Step 4: Add the whole numbers.

$4\frac{3}{4} = 4\frac{6}{8}$
$+\ 1\frac{7}{8} = +\ 1\frac{7}{8}$
$5\frac{13}{8}$

Step 5: Change improper fraction answers to mixed numbers.

$5\frac{13}{8} - \frac{8}{8} = 6\frac{5}{8}$

Solve and simplify your answer.

a. $6\frac{3}{8}$ **b.** $8\frac{1}{2}$ **c.** $3\frac{7}{10}$ **d.** $7\frac{8}{9}$

$2\frac{17}{12} = 3\frac{5}{12}$ $6\frac{31}{28} = 7\frac{3}{28}$ $12\frac{20}{15} = 13\frac{5}{15} = 13\frac{1}{3}$ $12\frac{12}{10} = 13\frac{2}{10} = 13\frac{1}{5}$

i.
$6\frac{3}{4}$
$+\ 3\frac{4}{5}$
$9\frac{31}{20} = 10\frac{11}{20}$

j.
$7\frac{1}{3}$
$+\ 7\frac{7}{9}$
$14\frac{10}{9} = 15\frac{1}{9}$

k.
$4\frac{6}{7}$
$+\ 3\frac{5}{14}$
$7\frac{17}{14} = 8\frac{3}{14}$

l.
$8\frac{5}{12}$
$+\ \frac{3}{4}$
$8\frac{14}{12} = 9\frac{2}{12} = 9\frac{1}{6}$

m.
$2\frac{7}{5}$
$+\ 3\frac{2}{10}$
$5\frac{16}{10} = 6\frac{6}{10} = 6\frac{3}{5}$

n.
$2\frac{5}{4}$
$+\ 2\frac{3}{8}$
$4\frac{13}{8} = 5\frac{5}{8}$

o.
$1\frac{1}{2}$
$+\ \frac{8}{6}$
$1\frac{11}{6} = 2\frac{5}{6}$

p.
$8\frac{8}{7}$
$+\ 3\frac{4}{3}$
$11\frac{52}{21} = 12\frac{31}{21} = 13\frac{10}{21}$