Name _____

Date _____

Rename Before Subtracting Fractions

Unlike Fractions

Renaming Fractions

- Denominators must be the same before subtracting.
- Make sure the first fraction (top) is always greater than the second fraction (bottom).
- If needed, borrow from the whole number to make the fraction larger. $4\frac{1}{2} = 3\frac{3}{2}$

A.

$3\frac{1}{4} \rightarrow 3\frac{1}{4} \rightarrow 2\frac{5}{4}$ *First, make common denominators.*

$-\ 1\frac{1}{2} \rightarrow 1\frac{2}{4} \rightarrow 1\frac{2}{4}$ *The top fraction is not larger, so we must borrow:* $3\frac{1}{4} = 2\frac{5}{4}$

$1\frac{3}{4}$ *Subtract and check for lowest terms.*

B. Explain what to do.

$6\frac{1}{3} \rightarrow 6\frac{5}{15} \rightarrow 5\frac{20}{15}$ *First,* _____.

$-\ 2\frac{3}{5} \rightarrow 2\frac{9}{15} \rightarrow 2\frac{9}{15}$ *Then,* _____.

$3\frac{11}{15}$ *Finally,* _____.

Directions: Subtract and use lowest terms. Shade the box if the answer contains an even denominator. Show work for each problem.

Water expands ____ % when it freezes.

1. $6\frac{1}{7} - 4\frac{1}{12}$	**2.** $9\frac{1}{4} - 4\frac{4}{8}$	**3.** $8\frac{1}{2} - 2\frac{7}{8}$	**4.** $10\frac{3}{10} - 2\frac{4}{5}$	**5.** $7\frac{4}{9} - 2\frac{5}{6}$
6. $6\frac{2}{15} - 4\frac{1}{6}$	**7.** $9\frac{1}{3} - 6\frac{2}{5}$	**8.** $7\frac{1}{2} - 3\frac{5}{8}$	**9.** $10\frac{2}{7} - 3\frac{1}{3}$	**10.** $6\frac{1}{3} - 4\frac{6}{9}$
11. $6\frac{3}{4} - 1\frac{4}{5}$	**12.** $7\frac{3}{8} - 6\frac{1}{2}$	**13.** $9\frac{1}{3} - 6\frac{3}{4}$	**14.** $10\frac{1}{12} - 5\frac{3}{4}$	**15.** $5\frac{1}{6} - 3\frac{5}{18}$

Way to go! These are the most difficult type of fractions because they involve several steps – you did it!

ANSWER KEY

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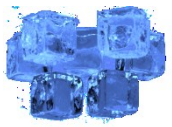
Water expands __9__ % when it freezes.



1. $6\frac{1}{7} - 4\frac{1}{12}$ $1\frac{9}{14}$	**2.** $9\frac{1}{4} - 4\frac{4}{8}$ $4\frac{3}{4}$	**3.** $8\frac{1}{2} - 2\frac{7}{8}$ $5\frac{5}{8}$	**4.** $10\frac{3}{10} - 2\frac{4}{5}$ $7\frac{1}{2}$	**5.** $7\frac{4}{9} - 2\frac{5}{6}$ $4\frac{11}{18}$
6. $6\frac{2}{15} - 4\frac{1}{6}$ $1\frac{29}{30}$	**7.** $9\frac{1}{3} - 6\frac{2}{5}$ $2\frac{14}{15}$	**8.** $7\frac{1}{2} - 3\frac{5}{8}$ $3\frac{7}{8}$	**9.** $10\frac{2}{7} - 3\frac{1}{3}$ $6\frac{20}{21}$	**10.** $6\frac{1}{3} - 4\frac{6}{9}$ $1\frac{2}{3}$
11. $6\frac{3}{4} - 1\frac{4}{5}$ $4\frac{19}{20}$	**12.** $7\frac{3}{8} - 6\frac{1}{2}$ $\frac{7}{8}$	**13.** $9\frac{1}{3} - 6\frac{3}{4}$ $2\frac{7}{12}$	**14.** $10\frac{1}{12} - 5\frac{3}{4}$ $4\frac{1}{3}$	**15.** $5\frac{1}{6} - 3\frac{5}{18}$ $1\frac{8}{9}$

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