NAME _____

Lesson 15 Addition and Subtraction

The denominators 4 and 10 have a common factor of 2. Use $(4 \times 10) \div 2$ or 20 as the common denominator.

$$\begin{array}{r} \frac{3}{4} \\ +\frac{7}{10} \\ \hline \end{array} \rightarrow \begin{array}{r} \frac{15}{20} \\ +\frac{14}{20} \\ \hline \frac{29}{20} = 1\frac{9}{20} \end{array} \qquad \begin{array}{r} 2\frac{9}{10} \\ +3\frac{1}{4} \\ \hline \end{array} \rightarrow \begin{array}{r} 2\frac{18}{20} \\ +3\frac{5}{20} \\ \hline 5\frac{23}{20} = 6\frac{3}{20} \end{array}$$

The denominators 8 and 12 have a common factor of 4. Use $(8 \times 12) \div 4$ or 24 as the common denominator.

$$\begin{array}{r} \frac{7}{8} \\ -\frac{5}{12} \\ \hline \end{array} \rightarrow \begin{array}{r} \frac{21}{24} \\ -\frac{10}{24} \\ \hline \frac{11}{24} \end{array} \qquad \begin{array}{r} 6\frac{11}{12} \\ -2\frac{5}{8} \\ \hline \end{array} \rightarrow \begin{array}{r} 6\frac{22}{24} \\ -2\frac{15}{24} \\ \hline 4\frac{7}{24} \end{array}$$

Write each answer in simplest form.

	a	*b*	*c*	*d*
1.	$\frac{1}{6} + \frac{3}{8}$	$\frac{3}{4} + \frac{1}{6}$	$\frac{3}{10} + \frac{4}{15}$	$\frac{5}{6} + \frac{4}{9}$
2.	$1\frac{3}{4} + 1\frac{3}{10}$	$3\frac{7}{15} + 2\frac{1}{6}$	$4\frac{11}{12} + 5\frac{8}{9}$	$8\frac{5}{6} + 4\frac{7}{10}$
3.	$\frac{1}{4} - \frac{1}{6}$	$\frac{8}{9} - \frac{5}{6}$	$\frac{7}{12} - \frac{3}{16}$	$\frac{13}{25} - \frac{7}{15}$
4.	$2\frac{5}{6} - 1\frac{1}{4}$	$6\frac{11}{15} - 3\frac{7}{10}$	$9\frac{1}{8} - 5\frac{1}{10}$	$8\frac{17}{20} - 2\frac{5}{12}$

Perfect score: 16 My score: _____

17) $17 + (-22)$

18) $-30 - 8$

19) $-32 - 44$

20) $-30 + 18$

21) $\frac{-6}{-2}$

22) $-12 \cdot -2$

23) $-4 \cdot 8$

24) $\frac{18}{-6}$

25) $30 - 5$

26) $33 + 48$

27) $12 - (-28)$

28) $10 \cdot 10$

29) $\frac{-15}{3}$

30) $-5 - (-45)$

31) $-4 \cdot 6$

32) $\frac{32}{4}$

17) _____

18) _____

19) _____

20) _____

21) _____

22) _____

23) _____

24) _____

25) _____

26) _____

27) _____

28) _____

29) _____

30) _____

31) _____

32) _____