Diagnostic Test
Unit 4 Fractions: Adding & Subtracting

Purpose: to help the student and instructor determine what, if any, sections of this unit the student needs to study.

Do all the math work neatly on the test itself. The instructor will pay as much attention to the work as the answers.

1. Mark the box below to show $\frac{3}{5}$ of the box.

2. Write down what the numerator of a fraction is and what the numerator means.

3. Write down what the denominator of a fraction is and what the denominator means.

4. Reduce the fractions below to lowest terms.

   $\frac{8}{18}$ $\frac{24}{80}$ $\frac{5}{5}$

5. Rewrite the two fractions below so that they have a common denominator.

   $\frac{5}{9}$ $\frac{5}{6}$

6. Using a common denominator, show which of the two fractions below is bigger.

   $\frac{8}{11}$ $\frac{5}{7}$

7. Write the answer in lowest terms.

   $\frac{4}{15} - \frac{1}{6} =$

8. Write the answer in lowest terms.

$\frac{1}{4} + \frac{1}{7} =$

9. In 15 minutes, I walked $\frac{2}{3}$ mile and my friend walked $\frac{5}{8}$ mile. Who walked farther? How much farther?

10. I walked $\frac{3}{4}$ mile on Monday and $\frac{5}{6}$ mile on Tuesday. How far did I walk altogether? Write your answer in simplest form.

11. Define and give an example of an "improper fraction" and a "mixed number."

12. Write the answer is simplest form.

$$\begin{array}{r} 2\frac{11}{16} \\ +\ 7\ \frac{2}{3} \\ \hline \end{array}$$

13. Write the answer in simplest form.

$$\begin{array}{r} 10\ \frac{1}{6} \\ -\ 3\ \frac{4}{5} \\ \hline \end{array}$$

14. I picked $2\frac{5}{8}$ pounds of strawberries in the morning and $1\frac{3}{4}$ pounds after lunch. On the way home, I ate $\frac{5}{6}$ pound. How many pounds of strawberries did I have when I got home?