Name _____ Date _____

1. Draw a tape diagram to represent each addend. Decompose one of the tape diagrams to make like units. Then, write a complete number sentence. Use a number bond to write each sum as a mixed number.

a. $\frac{7}{8} + \frac{1}{4}$

b. $\frac{4}{8} + \frac{2}{4}$

c. $\frac{4}{6} + \frac{1}{2}$

d. $\frac{3}{5} + \frac{8}{10}$

2. Draw a number line to model the addition. Then, write a complete number sentence. Use a number bond to write each sum as a mixed number.

a. $\frac{1}{2} + \frac{5}{8}$

b. $\frac{3}{4} + \frac{3}{8}$

c. $\frac{4}{10} + \frac{4}{5}$

d. $\frac{1}{3} + \frac{5}{6}$

3. Solve. Write the sum as a mixed number. Draw a model if needed.

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

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

c. $\frac{5}{6} + \frac{1}{3}$

d. $\frac{9}{10} + \frac{2}{5}$

e. $\frac{4}{12} + \frac{3}{4}$

f. $\frac{1}{2} + \frac{5}{6}$

g. $\frac{3}{12} + \frac{5}{6}$

h. $\frac{7}{10} + \frac{4}{5}$

Answer Key

1. a. Tape diagrams represent $\frac{7}{8}$ and $\frac{2}{8}$; $\frac{7}{8}+\frac{2}{8}=\frac{9}{8}$; number bond shows $\frac{9}{8}$ as $\frac{8}{8}$ and $\frac{1}{8}$; $1\frac{1}{8}$

   b. Tape diagrams represent $\frac{4}{8}$ and $\frac{4}{8}$; $\frac{4}{8}+\frac{4}{8}=\frac{8}{8}$; 1

   c. Tape diagrams represent $\frac{4}{6}$ and $\frac{3}{6}$; $\frac{4}{6}+\frac{3}{6}=\frac{7}{6}$; number bond shows $\frac{7}{6}$ as $\frac{6}{6}$ and $\frac{1}{6}$; $1\frac{1}{6}$

   d. Tape diagrams represent $\frac{6}{10}$ and $\frac{8}{10}$; $\frac{6}{10}+\frac{8}{10}=\frac{14}{10}$; number bond shows $\frac{14}{10}$ as $\frac{10}{10}$ and $\frac{4}{10}$; $1\frac{4}{10}$

2. a. Number line models $\frac{4}{8}+\frac{5}{8}$; $\frac{4}{8}+\frac{5}{8}=\frac{9}{8}$; number bond shows $\frac{9}{8}$ as $\frac{8}{8}$ and $\frac{1}{8}$; $1\frac{1}{8}$

   b. Number line models $\frac{6}{8}+\frac{3}{8}$; $\frac{6}{8}+\frac{3}{8}=\frac{9}{8}$; number bond shows $\frac{9}{8}$ as $\frac{8}{8}$ and $\frac{1}{8}$; $1\frac{1}{8}$

   c. Number line models $\frac{4}{10}+\frac{8}{10}$; $\frac{4}{10}+\frac{8}{10}=\frac{12}{10}$; number bond shows $\frac{12}{10}$ as $\frac{10}{10}$ and $\frac{2}{10}$; $1\frac{2}{10}$

   d. Number line models $\frac{2}{6}+\frac{5}{6}$; $\frac{2}{6}+\frac{5}{6}=\frac{7}{6}$; number bond shows $\frac{7}{6}$ as $\frac{6}{6}$ and $\frac{1}{6}$; $1\frac{1}{6}$

3. a. $\frac{4}{8}+\frac{6}{8}=\frac{10}{8}=1\frac{2}{8}$

   b. $\frac{7}{8}+\frac{6}{8}=\frac{13}{8}=1\frac{5}{8}$

   c. $\frac{5}{6}+\frac{2}{6}=\frac{7}{6}=1\frac{1}{6}$

   d. $\frac{9}{10}+\frac{4}{10}=\frac{13}{10}=1\frac{3}{10}$

   e. $\frac{4}{12}+\frac{9}{12}=\frac{13}{12}=1\frac{1}{12}$

   f. $\frac{3}{6}+\frac{5}{6}=\frac{8}{6}=1\frac{2}{8}$

   g. $\frac{3}{12}+\frac{10}{12}=\frac{13}{12}=1\frac{1}{12}$

   h. $\frac{7}{10}+\frac{8}{10}=\frac{15}{10}=1\frac{5}{10}$