

Name Jack

Date \_\_\_\_\_

1. Show one way to solve each problem. Express sums and differences as a mixed number when possible. Use number bonds when it helps you. Problem (a) is partially completed.

<p>a. <math>\frac{2}{5} + \frac{3}{5} + \frac{1}{5}</math></p> <p><math>= \frac{5}{5} + \frac{1}{5} = 1 + \frac{1}{5}</math></p> <p><u><math>= 1\frac{1}{5}</math></u></p>	<p>b. <math>\frac{3}{6} + \frac{1}{6} + \frac{3}{6}</math></p> <p><math>= \frac{6}{6} + \frac{1}{6} = 1 + \frac{1}{6}</math></p> <p><math>= 1\frac{1}{6}</math></p>	<p>c. <math>\frac{5}{7} + \frac{7}{7} + \frac{2}{7}</math></p> <p><math>= \frac{7}{7} + \frac{7}{7} = 1 + 1</math></p> <p><math>= 2</math></p>
<p>d. <math>\frac{7}{8} - \frac{3}{8} - \frac{1}{8}</math></p> <p><math>\frac{7}{8} - \frac{3}{8} = \frac{4}{8}</math></p> <p><math>\frac{4}{8} - \frac{1}{8} = \frac{3}{8}</math></p>	<p>e. <math>\frac{7}{9} + \frac{1}{9} + \frac{4}{9} = \frac{12}{9} = 1\frac{3}{9}</math></p> <p><math>\frac{9}{9} + \frac{3}{9}</math></p>	<p>f. <math>\frac{4}{10} + \frac{11}{10} + \frac{5}{10} = \frac{20}{10} = 2</math></p> <p><math>\frac{10}{10} + \frac{10}{10}</math></p>
<p>g. <math>1 - \frac{3}{12} - \frac{4}{12}</math></p> <p><math>\frac{12}{12} - \frac{3}{12} = \frac{9}{12}</math></p> <p><math>\frac{9}{12} - \frac{4}{12} = \frac{5}{12}</math></p>	<p>h. <math>1\frac{2}{3} - \frac{1}{3} - \frac{1}{3}</math></p> <p><math>\frac{5}{3} - \frac{2}{3} = \frac{3}{3} = 1</math></p>	<p>i. <math>\frac{10}{12} + \frac{5}{12} + \frac{2}{12} + \frac{7}{12}</math></p> <p><math>\frac{12}{12} + \frac{12}{12} = 1 + 1 = 2</math></p>

2. Monica and Stuart used different strategies to solve  $\frac{5}{8} + \frac{2}{8} + \frac{5}{8}$ .

Monica's Way

$$\frac{5}{8} + \frac{2}{8} + \frac{5}{8} = \frac{7}{8} + \frac{5}{8} = \frac{8}{8} + \frac{4}{8} = 1\frac{4}{8}$$

$$\begin{array}{c} \wedge \\ \frac{1}{8} \quad \frac{4}{8} \end{array}$$

Stuart's Way

$$\frac{5}{8} + \frac{2}{8} + \frac{5}{8} = \frac{12}{8} = 1 + \frac{4}{8} = 1\frac{4}{8}$$

$$\begin{array}{c} \wedge \\ \frac{8}{8} \quad \frac{4}{8} \end{array}$$

Whose strategy do you like best? Why?

I like Stuart's way because it is easier to understand. Stuart added all of the eighths and then made a mixed number. Monica also added the eighths, but it took more steps. Well, not really... but I like how Stuart found the total number of eighths and then made the parts and whole.

3. You gave one solution for each part of Problem 1. Now, for each problem indicated below, give a different solution method.

1(c)  $\frac{5}{7} + \frac{7}{7} + \frac{2}{7} = \frac{14}{7}$

$$\begin{array}{c} \wedge \\ \frac{7}{7} \quad \frac{7}{7} \\ = 2 \end{array}$$

1(f)  $\frac{4}{10} + \frac{11}{10} + \frac{5}{10} = \frac{10}{10} + \frac{10}{10} = 1 + 1 = 2$

$$\begin{array}{c} \wedge \\ \frac{6}{10} \quad \frac{4}{10} \end{array}$$

1(g)  $1 - \frac{3}{12} - \frac{4}{12}$

$$\begin{array}{c} \wedge \\ \frac{2}{12} \\ \frac{12}{12} - \frac{2}{12} = \frac{10}{12} \end{array}$$