1. Rearrange the terms so that you can add or subtract mentally, then solve.

   a. \( \frac{3}{4} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} \)

      \[ 2 + 1 = \sqrt{3} \]

   b. \( \frac{1}{6} - \frac{3}{4} + \frac{5}{6} \)

      \[ 4 - \frac{3}{4} = \frac{3}{4} \]

   c. \( \frac{5}{8} - \frac{2}{7} - \frac{2}{7} - \frac{5}{8} \)

      \[ 5 - (2\frac{4}{7} + \frac{2}{7}) = 5 - 3\frac{1}{7} = 1\frac{6}{7} \]

   d. \( \frac{7}{9} + \frac{1}{2} - \frac{3}{4} + \frac{2}{9} \)

      \[ 1 - 1 = 0 \]

2. Fill in the blank to make the statement true.

   a. \( \frac{11}{4} + \frac{22}{28} \)

      \[ = \frac{71}{28} - \frac{6}{28} - \frac{42}{28} \]

      \[ = 6\frac{13}{28} - 42\frac{28}{28} = 5\frac{41}{28} - 42\frac{28}{28} = 4\frac{69}{28} - 42\frac{28}{28} + 1\frac{27}{28} \]

   b. \( \frac{9}{6} + 1\frac{1}{4} + 2\frac{11}{12} = 14 \)

      \[ 10\frac{5}{6} + \frac{1}{4} + \_ = 14 \]

      \[ 10\frac{10}{12} + \frac{3}{12} + \_ = 14 \]

   c. \( \frac{7}{10} + \frac{15}{10} - \_ = \frac{12}{10} \)

   \[ \frac{22}{10} - \frac{10}{10} = \frac{12}{10} \]

   \[ \frac{10}{10} = 1 \]

   d. \( \frac{31}{8} - 20 - 3\frac{1}{4} = 14\frac{5}{8} \)

      \[ 20 + 3\frac{2}{8} + 14\frac{5}{8} = \frac{373}{8} \]
Lesson 14 Homework

3. Laura bought \(\frac{8}{10} \text{ yd}\) of ribbon. She used \(1\frac{2}{5} \text{ yd}\) to tie a package and \(2\frac{1}{3} \text{ yd}\) to make a bow. Joe later gave her \(4\frac{2}{5} \text{ yd}\). How much ribbon does she now have?

\[
8\frac{3}{10} - 1\frac{2}{5} - 2\frac{1}{3} + 4\frac{3}{5} = ?
\]

\[
(8\frac{3}{10} - 2\frac{10}{30}) + (4\frac{3}{5} - 1\frac{2}{3})
\]

She has \(9\frac{1}{6} \text{ yd}\) remaining.

4. Mia bought \(10\frac{1}{9} \text{ lb}\) of flour. She used \(2\frac{3}{4} \text{ lb}\) of flour to bake a banana cake and some to bake a chocolate cake. After baking the two cakes, she had \(3\frac{5}{6} \text{ lb}\) of flour left. How much flour did she use to bake the chocolate cake?

<table>
<thead>
<tr>
<th>Flour</th>
<th>BC</th>
<th>C</th>
<th>CC</th>
<th>Left</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(2\frac{3}{4} \text{ lb})</td>
<td>(3\frac{5}{6} \text{ lb})</td>
<td>(10\frac{1}{6} \text{ lb})</td>
<td>(6\frac{7}{12} \text{ lb})</td>
</tr>
</tbody>
</table>

\[
10\frac{1}{6} - 6\frac{7}{12} = 4\frac{8}{12} - \frac{42}{12} = 3\frac{8}{12} - \frac{42}{12} = 3\frac{8}{12} = 3\frac{19}{36}
\]

\(3\frac{19}{36} \text{ lb}\) She used \(3\frac{19}{36} \text{ lb}\) of flour for the chocolate cake.