1. Henri measures the dimensions of a rectangular section of wallboard. It is $3\frac{1}{2}$ feet wide and $4\frac{3}{4}$ feet long. What is the perimeter? You may want to draw a picture of the board.

$3\frac{1}{2} + 4\frac{3}{4} + 3\frac{1}{2} + 4\frac{3}{4}$ Add the length of each of the four sides to find perimeter.

Strategy 1:

$3\frac{1}{2} + 4\frac{3}{4}$ First add to find the sum of two of the sides.

$\frac{1}{2} = \frac{2}{4}$ A common denominator is four, so rename $\frac{1}{2}$.

$3\frac{2}{4} + 4\frac{3}{4} = 7\frac{5}{4}$ or $8\frac{1}{4}$ Add like fractions to get the sum.

$2 \times 8\frac{1}{4} = 16\frac{1}{2}$ Double $8\frac{1}{4}$ to find the sum of all four sides.

Strategy 2:

$2 \times 3\frac{1}{2} = 7$ Double $3\frac{1}{2}$ to find the sum of two sides.

$2 \times 4\frac{3}{4} = 8\frac{6}{4}$ or $9\frac{1}{2}$ Double $4\frac{3}{4}$ to find the sum of the other two sides.

$7 + 9\frac{1}{2} = 16\frac{1}{2}$ Add to find the sum of all four sides.

2. Carter Construction wants to place a series of ads highlighting the quality of their work and the reasonableness of their prices. They purchased three $\frac{1}{4}$-page ads, three $\frac{1}{8}$-page ads, and three $\frac{3}{16}$-page ads. What is the total amount of pages they bought?

$3(\frac{1}{4}) + 3(\frac{1}{8}) + 3(\frac{3}{16})$ Multiply the number of ads by the size of the ads. Then add to find the total amount of pages Carter Construction purchased.

$\frac{3}{4} + \frac{3}{8} + \frac{9}{16}$ Three $\frac{1}{4}$-page ads is equal to $\frac{3}{4}$ page. Three $\frac{1}{8}$-page ads is equal to $\frac{3}{8}$ page. Three $\frac{3}{16}$-page ads is equal to $\frac{9}{16}$ page.

$\frac{12}{16} + \frac{6}{16} + \frac{9}{16} = \frac{27}{16}$ or $1\frac{11}{16}$ A common denominator is 16, so rename $\frac{3}{4}$ and $\frac{3}{8}$. Add to find the sum.

3. Dr. Dawson is tracking the price of a stock he owns. On Monday the price of the stock was $32\frac{15}{16}$. On Tuesday the price rose $3\frac{3}{8}$. What was the stock's price on Tuesday?

$32\frac{15}{16} + 3\frac{3}{8}$ Add to find the stock's price on Tuesday.

$32\frac{15}{16} + 3\frac{6}{16} = 35\frac{21}{16}$ or $36\frac{5}{16}$ A common denominator is 16, so rename $\frac{3}{8}$. Add to find the sum.

4. Think of two fractions with different denominators whose sum equals $2\frac{1}{3}$. Think of a different pair of fractions whose sum is $2\frac{1}{3}$.

There are many possible answers. Start by selecting any number less than $2\frac{1}{3}$, like $1\frac{5}{6}$.

Strategy 1: Use Subtraction

$2\frac{1}{3} - 1\frac{5}{6}$ Subtract your number from $2\frac{1}{3}$.

$2\frac{1}{3} = 2\frac{2}{6}$ or $1\frac{8}{6}$ A common denominator is six, so rename $2\frac{1}{3}$.

$1\frac{8}{6} - 1\frac{5}{6} = \frac{3}{6}$ or $\frac{1}{2}$ Subtract to find the second fraction.

Strategy 2: Use Addition

$1\frac{5}{6} + ? = 2\frac{1}{3}$ Add to your number to reach $2\frac{1}{3}$.

$1\frac{5}{6} + \frac{1}{6} = 2$ Add $\frac{1}{6}$ to reach two.

$2 + \frac{1}{3} = 2\frac{1}{3}$ Add $\frac{1}{3}$ to reach $2\frac{1}{3}$.

$\frac{1}{6} + \frac{1}{3} = \frac{3}{6}$ or $\frac{1}{2}$ Find the sum of the two amounts to find the second fraction.

A Few Possible Solutions:

$1\frac{5}{6}$ and $\frac{1}{2}$ $\frac{4}{6}$ and $1\frac{2}{3}$ $\frac{1}{4}$ and $2\frac{1}{12}$ $\frac{3}{4}$ and $1\frac{7}{12}$