

Homework

In the space below, design and sketch a bird hotel. Assume your design will be made from wood, and includes these characteristics.

- ▶ Walls not exposed to weathering are $\frac{1}{4}$ -inch thick.
- ▶ Walls exposed to weathering are $\frac{1}{2}$ -inch thick.
- ▶ The rooms are identical.

State the number of birds your design will accommodate, and the dimensions of one room. Then use the dimensions to compute the overall length, width, and height of your hotel.

Remembering

Add or subtract. Give your answer in simplest form.

$$\begin{array}{r} 1. \quad 7\frac{1}{4} \\ - 4\frac{5}{6} \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 1\frac{9}{10} \\ + 1\frac{9}{10} \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 4 \\ - 1\frac{6}{7} \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad \frac{7}{10} \\ + 1\frac{11}{12} \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 4\frac{4}{5} \\ - 1\frac{7}{8} \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 3\frac{5}{12} \\ + 1\frac{2}{3} \\ \hline \end{array}$$

Compare.

$$7. \quad \frac{1}{57} \bigcirc \frac{1}{47}$$

$$8. \quad \frac{5}{7} \bigcirc \frac{4}{5}$$

$$9. \quad \frac{14}{15} \bigcirc \frac{15}{16}$$

$$10. \quad \frac{5}{6} \bigcirc \frac{2}{3}$$

$$11. \quad 15\frac{3}{8} \bigcirc 15\frac{7}{10}$$

$$12. \quad 14\frac{1}{10} \bigcirc 13\frac{9}{10}$$

Solve.

Show your work.

13. Blake watched $\frac{1}{6}$ of a movie on Friday, $\frac{3}{5}$ of the movie on Saturday, and the rest on Sunday. What fraction of the movie did he watch on Sunday?

14. **Stretch Your Thinking** Marshall surveyed his classmates and found that $\frac{5}{7}$ have a sister, $\frac{1}{2}$ have a brother, and $\frac{3}{14}$ don't have any siblings.

- a. What is the sum of the three fractions?

- b. Why does it make sense for the sum to be greater than 1 whole?
