

**Step 1**Find  $2\frac{2}{3} + 1\frac{1}{2}$ .

Write equivalent fractions with the least common denominator.

$$\begin{array}{r} 2\frac{2}{3} = 2\frac{4}{6} \\ + 1\frac{1}{2} = + 1\frac{3}{6} \\ \hline \end{array}$$

**Step 2**

Add the fractions.

$$\begin{array}{r} 2\frac{2}{3} = 2\frac{4}{6} \quad \left[ \frac{1}{6} \quad \frac{1}{6} \quad \frac{1}{6} \quad \frac{1}{6} \right] \\ + 1\frac{1}{2} = + 1\frac{3}{6} \quad \left[ \frac{1}{6} \quad \frac{1}{6} \quad \frac{1}{6} \right] \\ \hline 3\frac{7}{6} \end{array}$$

**Step 3**

Add the whole numbers. Simplify the sum if necessary.

$$\begin{array}{r} 2\frac{2}{3} = 2\frac{4}{6} \quad \left[ \begin{array}{c} 1 \\ 1 \\ 1 \end{array} \right] \\ + 1\frac{1}{2} = + 1\frac{3}{6} \quad \left[ \frac{1}{6} \quad \frac{1}{6} \quad \frac{1}{6} \quad \frac{1}{6} \quad \frac{1}{6} \quad \frac{1}{6} \right] \\ \hline 3\frac{7}{6} \\ 3\frac{7}{6} = 4\frac{1}{6} \end{array}$$

Rhoda prepared  $4\frac{1}{6}$  cups of soil.**Independent Practice**

**Leveled Practice** For 7 through 18, find each sum. Simplify, if necessary.  
Estimate for reasonableness.

7.  $3\frac{1}{6} = 3\frac{\boxed{2}}{6}$   
 $+ 5\frac{2}{3} = + 5\frac{\boxed{4}}{6}$

8.  $11\frac{1}{2} = 11\frac{\boxed{3}}{6}$   
 $+ 10\frac{3}{5} = + 10\frac{\boxed{6}}{10}$

9.  $9\frac{3}{16}$   
 $+ 7\frac{5}{8}$

10.  $5\frac{6}{7}$   
 $+ 8\frac{1}{7}$

11.  $4\frac{1}{10} + 6\frac{1}{2}$

12.  $9\frac{7}{12} + 4\frac{3}{4}$

13.  $5 + 3\frac{1}{8}$

14.  $8\frac{3}{4} + 7\frac{3}{4}$

15.  $2\frac{3}{4} + 7\frac{3}{5}$

16.  $3\frac{8}{9} + 8\frac{1}{2}$

17.  $1\frac{7}{12} + 2\frac{3}{8}$

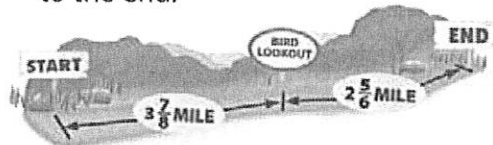
18.  $3\frac{11}{12} + 9\frac{1}{16}$

**Problem Solving**

19. Arnie skates  $1\frac{3}{4}$  miles from home to the lake, then goes  $1\frac{1}{3}$  miles around the lake, and then back home. How many miles did he skate?

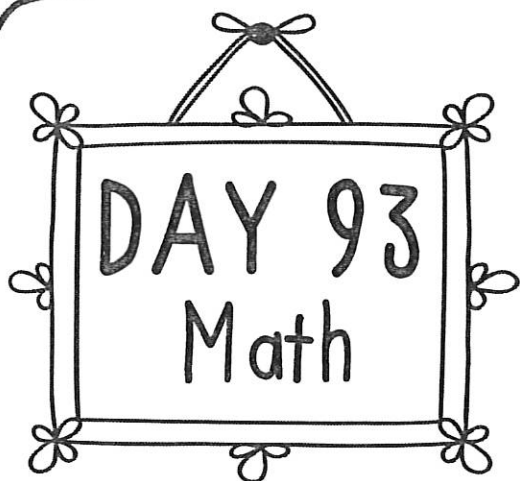
- A  $2\frac{1}{12}$  miles  
B  $3\frac{1}{12}$  miles  
C  $4\frac{5}{6}$  miles  
D  $4\frac{5}{12}$  miles

20. a Use the map below to find the distance from the start of the trail to the end.



- b Louise walked from the start of the trail to the bird lookout and back. Did she walk more or less than if she had walked from the start of the trail to the end?

21. The length of a male Parsons chameleon can be up to  $23\frac{1}{2}$  inches. It can extend its tongue up to  $35\frac{1}{4}$  inches to catch its food. What is the total length of a male Parsons chameleon when its tongue is fully extended?



# Addition, Subtraction, & Multiplication of Fractions

Create your own problem and then solve it.

$$\frac{4}{10} + \frac{3}{10} = \underline{\hspace{2cm}}$$

$$\frac{1}{5} + \frac{2}{5} = \underline{\hspace{2cm}}$$

$$\frac{3}{4} + \frac{3}{4} = \underline{\hspace{2cm}}$$

$$\frac{7}{9} - \frac{2}{9} = \underline{\hspace{2cm}}$$

$$\frac{5}{6} - \frac{1}{6} = \underline{\hspace{2cm}}$$

$$\frac{11}{15} - \frac{5}{15} = \underline{\hspace{2cm}}$$

$$\frac{4}{5} + \frac{3}{10} = \underline{\hspace{2cm}}$$

$$\frac{1}{8} + \frac{1}{2} = \underline{\hspace{2cm}}$$

$$\frac{3}{12} + \frac{3}{4} = \underline{\hspace{2cm}}$$

$$\frac{2}{10} - \frac{1}{5} = \underline{\hspace{2cm}}$$

$$\frac{9}{15} - \frac{2}{5} = \underline{\hspace{2cm}}$$

$$\frac{10}{12} - \frac{3}{4} = \underline{\hspace{2cm}}$$



Ex:

$$\frac{5}{1} \times \frac{1}{8} = \frac{5}{8}$$

$$3 \times \frac{1}{6} = \underline{\hspace{2cm}}$$

$$4 \times \frac{1}{3} = \underline{\hspace{2cm}}$$

$$2 \times \frac{1}{4} = \underline{\hspace{2cm}}$$

$$6 \times \frac{1}{10} = \underline{\hspace{2cm}}$$

$$7 \times \frac{1}{5} = \underline{\hspace{2cm}}$$

$$3 \times \frac{2}{5} = \underline{\hspace{2cm}}$$

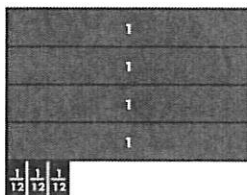
$$2 \times \frac{3}{4} = \underline{\hspace{2cm}}$$

$$4 \times \frac{2}{3} = \underline{\hspace{2cm}}$$

**Step 1**

Write equivalent fractions with the least common denominator.

$$\begin{array}{r} 4\frac{1}{4} = 4\frac{3}{12} \\ - 1\frac{2}{3} = -1\frac{8}{12} \\ \hline \end{array}$$

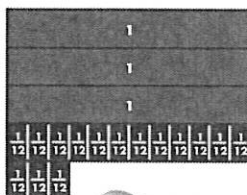


You cannot subtract  $\frac{8}{12}$  from  $\frac{3}{12}$ .

**Step 2**

Rename  $4\frac{3}{12}$  to show more twelfths.

$$\begin{array}{r} 4\frac{3}{12} = 3\frac{15}{12} \\ - 1\frac{8}{12} = -1\frac{8}{12} \\ \hline \end{array}$$



$1 = \frac{12}{12}$

**Step 3**

Subtract the fractions. Then subtract the whole numbers. Simplify, if necessary.

$$\begin{array}{r} 4\frac{3}{4} = 4\frac{3}{12} = 3\frac{15}{12} \\ - 1\frac{2}{3} = -1\frac{8}{12} = -1\frac{8}{12} \\ \hline 2\frac{7}{12} \end{array}$$

The hole is  $2\frac{7}{12}$  inches wider.

## Independent Practice

**Leveled Practice** For 7 through 18, find each difference. Simplify, if necessary. Estimate for reasonableness.

7.  $\begin{array}{r} 8\frac{1}{4} = 8\frac{2}{8} = 7\frac{8}{8} \\ - 2\frac{7}{8} = -2\frac{7}{8} = 2\frac{1}{8} \\ \hline \end{array}$

8.  $\begin{array}{r} 3\frac{1}{2} = 3\frac{2}{4} \\ - 1\frac{1}{3} = 1\frac{2}{6} \\ \hline \end{array}$

9.  $\begin{array}{r} 4\frac{1}{8} \\ - 1\frac{1}{2} \\ \hline \end{array}$

10.  $\begin{array}{r} 6 \\ - 2\frac{4}{5} \\ \hline \end{array}$

11.  $6\frac{1}{3} - 5\frac{2}{3}$

12.  $9\frac{1}{2} - 6\frac{3}{4}$

13.  $8\frac{3}{16} - 3\frac{5}{8}$

14.  $7\frac{1}{2} - \frac{7}{10}$

15.  $15\frac{1}{6} - 4\frac{3}{8}$

16.  $13\frac{1}{12} - 8\frac{1}{4}$

17.  $6\frac{1}{3} - 2\frac{3}{5}$

18.  $10\frac{5}{12} - 4\frac{7}{8}$

### Problem Solving

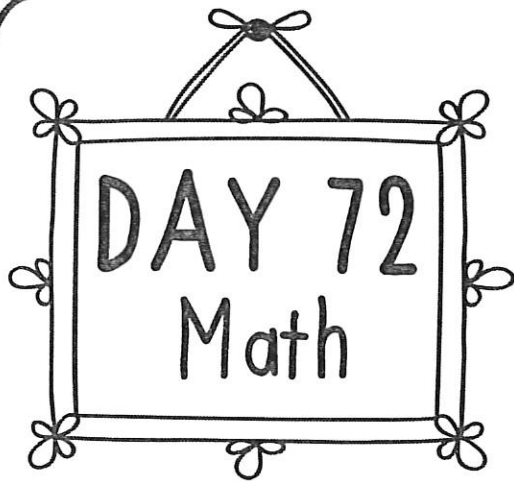
19. The average weight of a basketball is  $21\frac{1}{10}$  ounces. The average weight of a baseball is  $5\frac{1}{4}$  ounces. How many more ounces does the basketball weigh?

20. As of 2006, the world's shortest horse is Thumbelina. She is  $17\frac{1}{4}$  inches tall. The second shortest horse, Black Beauty, is  $18\frac{1}{2}$  inches tall. How much shorter is Thumbelina than Black Beauty?

21. The smallest mammals on Earth are the bumblebee bat and the Etruscan pygmy shrew. A length of a bumblebee bat is  $1\frac{9}{50}$  inches. A length of an Etruscan pygmy shrew is  $1\frac{21}{50}$  inches. How much smaller is the bat than the shrew?

22. **Geometry** How are the parallelogram and the rectangle alike? How are they different?





# Decimal Multiplication & Division

$$23 \times 7.3 = 1679$$

$$6.91 \times 82 = 56662$$

$$0.38 \times 51 = 1938$$

$$43.8 \div 3 = 146$$

$$4.35 \div 5 = 87$$

$$6.46 \div 4 = 1615$$

$$2.96 \div 8 = 37$$

$$298.92 \div 6 = 4982$$

$$89.6 \div 4 = 224$$



$$16.7 \times 5 = \underline{\hspace{2cm}}$$

$$934.6 \times 9 = \underline{\hspace{2cm}}$$

$$253.8 \div 6 = \underline{\hspace{2cm}}$$

$$36.5 \div 5 = \underline{\hspace{2cm}}$$