

SKILL 4: Adding Mixed Numbers

Just as you can add whole numbers and fractions, you can add mixed numbers.

Example

Find $1\frac{1}{2} + 3\frac{5}{6}$ in simplest form.

The fractions do not have a common denominator.

$$\begin{array}{c} 1\frac{1}{2} \longrightarrow \\ +3\frac{5}{6} \end{array}$$

Rewrite the fractions with a common denominator.

$$1\frac{3}{6} \longrightarrow 3\frac{5}{6}$$

So,
$$1\frac{1}{2} + 3\frac{5}{6} = 5\frac{1}{3}$$
.

Add the whole numbers. Add the fractions.

$$\begin{array}{c}
1\frac{3}{6} \longrightarrow \\
+ 3\frac{5}{6} \\
\hline
4\frac{8}{6}
\end{array}$$

Rewrite the improper fraction as a mixed number in simplest form. Add the whole numbers.

$$\begin{array}{r}
 1\frac{3}{6} \\
 + 3\frac{5}{6} \\
 \hline
 4\frac{8}{6} = 4 + 1\frac{2}{6} \\
 = 4 + 1\frac{1}{3} \\
 = 5\frac{1}{3}
 \end{array}$$

Guided Practice

Rewrite each number in simplest form.

1.
$$4\frac{6}{5} = 5\frac{\Box}{5}$$

3.
$$3\frac{6}{4} = 3 + 1\frac{\Box}{4} = \Box$$

2.
$$12\frac{11}{8} = \frac{1}{8}$$

4.
$$5\frac{3}{3} = \square$$

Add. Write each sum in simplest form.

5.
$$8\frac{1}{5}$$
 $+ 1\frac{2}{5}$

6.
$$2\frac{2}{3}$$
 + $3\frac{2}{3}$

7.
$$1\frac{1}{2}$$
 + $1\frac{1}{2}$

8.
$$3\frac{4}{9}$$
 $+ 4\frac{7}{9}$

9.
$$4\frac{7}{8} \rightarrow 4\frac{\boxed{}}{8}$$

$$+2\frac{3}{4} \rightarrow +2\frac{\boxed{}}{8}$$

10.
$$1\frac{5}{6} \rightarrow 1\frac{\square}{6}$$

$$+3\frac{2}{3} \rightarrow +3\frac{\square}{\square}$$

$$4\frac{\square}{\square} = \square$$

SKILL 4: Practice

Add. Write the sum in simplest form.

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

2.
$$7\frac{2}{5}$$
 $+ 1\frac{2}{3}$

3.
$$9\frac{20}{23}$$
 + 14

4. 6
$$+ 14\frac{1}{2}$$

5. 4
$$+ 9\frac{5}{17}$$

6.
$$3\frac{16}{19}$$

7.
$$10\frac{13}{15}$$

+ $4\frac{13}{15}$

8. 2
$$+ 16\frac{5}{19}$$

9.
$$6\frac{1}{7}$$
 + $19\frac{2}{5}$

10.
$$15\frac{1}{2}$$
 + $17\frac{1}{7}$

11.
$$10\frac{1}{4} + 7\frac{3}{4}$$

12.
$$1\frac{4}{5}$$
 + $3\frac{5}{6}$

13.
$$11\frac{10}{11}$$

14.
$$11\frac{3}{8}$$
 + $16\frac{3}{4}$

15.
$$11\frac{4}{5}$$
 + $2\frac{13}{15}$

16.
$$16\frac{4}{15}$$
 + $8\frac{13}{15}$

- 17. Stephanie used $2\frac{7}{8}$ feet of ribbon to trim a pillowcase and $5\frac{1}{2}$ feet of ribbon to trim a quilt. How much ribbon did she use in all?
- 18. A recipe calls for $1\frac{1}{4}$ cups of cheddar cheese, $1\frac{1}{3}$ cups of Monterey jack cheese, and $1\frac{1}{2}$ cups of mozzarella cheese. How much cheese is used in the recipe?



19. Find the sum in simplest form: $6\frac{2}{3} + 2\frac{4}{9}$.

A $8\frac{1}{2}$

Skill 4

B $8\frac{3}{5}$

D $9\frac{1}{10}$

20. Kyle used $\frac{3}{5}$ yard of wire to hang one painting and $\frac{1}{4}$ yard of wire to hang another painting. How much wire did Kyle use in all?

 $\mathbf{F} = \frac{1}{5} \text{ yd}$

 $H \frac{4}{9} yd$

G $\frac{3}{20}$ yd

 $J = \frac{17}{20} \text{ yc}$