

D. Add or subtract the following mixed fractions.

1.  $5\frac{1}{10} + 1\frac{2}{5}$

2.  $4\frac{2}{3} - 3\frac{1}{5}$

3.  $1\frac{1}{2} + \frac{3}{4} + \frac{1}{6}$

4.  $9\frac{7}{8} - 3\frac{1}{2}$

5.  $2\frac{5}{9} - 1\frac{3}{4}$

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

7.  $1\frac{4}{9} - 1\frac{1}{3}$

8.  $2\frac{2}{3} - 1\frac{1}{6}$

9.  $6\frac{2}{5} - 5\frac{4}{9}$

10.  $1\frac{1}{4} + \frac{5}{6}$

11.  $\frac{3}{10} + 2\frac{4}{15}$

12.  $4\frac{5}{8} + 2\frac{2}{3}$

13.  $1\frac{3}{5} - \frac{3}{10}$

14.  $8\frac{1}{5} - 4\frac{2}{3}$

15.  $1\frac{2}{3} + 1\frac{3}{4} - 1\frac{5}{6}$

16.  $2 - \frac{3}{4}$

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

18.  $15 - 14\frac{3}{4}$

19.  $8\frac{3}{4} - 6$

20.  $5\frac{7}{8} + 2\frac{1}{4}$

21.  $5\frac{3}{7} - 4\frac{1}{6}$

E. Solve the following problems involving fractions.

1. The average grade 8 student spends  $\frac{3}{8}$  of his day sleeping and  $\frac{1}{3}$  of his day at school. What is the total amount of a day spent on both, and how much of the day does this student have for other activities?

2. Which fraction is larger,  $\frac{5}{8}$ ,  $\frac{2}{3}$  or  $\frac{3}{4}$ ?

3. Arrange these fractions in order from smallest to largest:  $\frac{3}{4}$ ,  $\frac{1}{2}$ ,  $\frac{5}{8}$ ,  $\frac{1}{6}$ ,  $\frac{7}{12}$ .

4. A plumber cuts three pieces of copper pipe  $4\frac{2}{3}$  dm,  $5\frac{1}{5}$  dm and  $3\frac{7}{10}$  dm. What is the total length of these pipes?

5. Water in a pond is at a depth of  $10\frac{3}{8}$  cm. After removing a rock from the pond the level drops  $1\frac{5}{6}$  cm. What is the new depth of the pond?

6. A new library book was  $4\frac{5}{8}$  cm thick. After 3 years one of its covers has fallen off and the book is now  $4\frac{1}{4}$  cm thick. How thick will this book be when the other cover falls off?

7. If a nail  $6\frac{1}{4}$  cm long is driven through two boards each  $1\frac{3}{4}$  cm thick, how much of the nail will stick out?