

**EXERCISE 5E**

Find the sum:

1.  $5/8 + 1/8$

**Solution**

$$\begin{aligned} \text{Given } 5/8 + 1/8 \\ 5/8 + 1/8 &= (5 + 1)/8 \\ &= 6/8 \\ &= 3/4 \end{aligned}$$

$$\therefore \text{Sum of } 5/8 + 1/8 = 3/4$$

2.  $4/9 + 8/9$

**Solution**

$$\begin{aligned} \text{Given } 4/9 + 8/9 \\ 4/9 + 8/9 &= (4 + 8)/9 \\ &= 12/9 \\ &= 4/3 \end{aligned}$$

$$\begin{aligned} \therefore \text{Sum of } 4/9 + 8/9 &= 4/3 \\ &= 1\frac{1}{3} \end{aligned}$$

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

**Solution**

$$1\frac{3}{5} + 2\frac{4}{5} = \frac{8}{5} + \frac{14}{5}$$

$$\Rightarrow \frac{8}{5} + \frac{14}{5} = \frac{22}{5} = 4\frac{2}{5}$$

$$\begin{array}{r} 5 \overline{) 22} \quad 4 \\ \underline{20} \\ 2 \end{array}$$

4.  $2/9 + 5/6$

**Solution**

# RS Aggarwal Solutions for Class 6 Chapter 5 Fractions

Given  
 $2/9 + 5/6$

3	9	6
3	3	2
2	1	2
1	1	1

LCM of 9 and 6 =  $(3 \times 3 \times 2) = 18$

$$\begin{aligned} 2/9 + 5/6 &= (2 \times 2) / (9 \times 2) + (5 \times 3) / (6 \times 3) \\ &= (4 + 15) / 18 \end{aligned}$$

$$18 \overline{) \begin{array}{r} 19 \\ 18 \\ \hline 1 \end{array}}$$

$$= 19/18$$

$$= 1 \frac{1}{18}$$

5.  $7/12 + 9/16$

Solution

Given  
 $7/12 + 9/16$

2	12	16
2	6	8
2	3	4
2	3	2
3	3	1
1	1	1

LCM of 12 and 16 =  $(2 \times 2 \times 2 \times 2 \times 3) = 48$

$$\begin{aligned} 7/12 + 9/16 &= (7 \times 4) / (12 \times 4) + (9 \times 3) / (16 \times 3) \\ &= (28 + 27) / 48 \\ &= 55/48 \end{aligned}$$

$$48 \overline{) \begin{array}{r} 55 \\ 48 \\ \hline 7 \end{array}}$$

$$= 1 \frac{7}{48}$$

6.  $4/15 + 17/20$

Solution

# RS Aggarwal Solutions for Class 6 Chapter 5 Fractions

Given

$$4/15 + 17/20$$

5	15	20
3	3	4
2	1	4
2	1	2
1	1	1

LCM of 15 and 20 = (5 × 3 × 2 × 2) = 60

$$\begin{aligned} 4/15 + 17/20 &= (4 \times 4) / (15 \times 4) + (17 \times 3) / (20 \times 3) \\ &= 16/60 + 51/60 \\ &= 67/60 \end{aligned}$$

$$= 1\frac{7}{60}$$

$$\begin{array}{r} 60 \overline{) 67} \quad 1 \\ \underline{60} \\ 7 \end{array}$$

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

Given

$$2\frac{3}{4} + 5\frac{5}{6}$$

$11/4 + 35/6$		
2	4	6
2	2	3
3	1	3
1	1	1

LCM of 4 and 6 = (2 × 2 × 3) = 12

$$\begin{aligned} 11/4 + 35/6 &= (11 \times 3) / (4 \times 3) + (35 \times 2) / (6 \times 2) \\ &= 33/12 + 70/12 \\ &= 103/12 \end{aligned}$$

$$\begin{array}{r} 12 \overline{) 103} \quad 8 \\ \underline{96} \\ 7 \end{array}$$

$$= 8\frac{7}{12}$$

RS Aggarwal Solutions for Class 6 Chapter 5  
Fractions

8.  $3\frac{1}{8} + 1\frac{5}{12}$

Solution

Given

$$3\frac{1}{8} + 1\frac{5}{12}$$
$$= 25/8 + 17/12$$

2	8	12
2	4	6
2	2	3
3	1	3
1		1

$$\text{LCM of 8 and 12} = (2 \times 2 \times 2 \times 3) = 24$$

$$25/8 + 17/12 = (25 \times 3) / (8 \times 3) + (17 \times 2) / (12 \times 2)$$
$$= 75/24 + 34/24$$
$$= 109/24$$

$$24 \overline{) 109} 4$$
$$\underline{96}$$
$$13$$

$$= 4\frac{13}{24}$$

## RS Aggarwal Solutions for Class 6 Chapter 5 Fractions

9.  $2\frac{7}{10} + 3\frac{8}{15}$

Solution

Given

$$2\frac{7}{10} + 3\frac{8}{15}$$

$$27/10 + 53/15$$

5	10	15
2	2	3
3	1	3
1		1

$$\text{LCM of 10 and 15} = (5 \times 3 \times 2) = 30$$

$$\begin{aligned} 27/10 + 53/15 &= (27 \times 3) / (10 \times 3) + (53 \times 2) / (15 \times 2) \\ &= 81/30 + 106/30 \\ &= 187/30 \end{aligned}$$

$$\begin{array}{r} 30 \overline{) 187} \quad 6 \\ \underline{180} \\ 7 \end{array}$$

$$= 6\frac{7}{30}$$

RS Aggarwal Solutions for Class 6 Chapter 5  
Fractions

10.  $3\frac{2}{3} + 1\frac{5}{6} + 2$

Solution

Given

$$3\frac{2}{3} + 1\frac{5}{6} + 2$$

$$11/3 + 11/6 + 2$$

3	3	6
2	1	2
1		1

$$\text{LCM of 3 and 6} = (3 \times 2) = 6$$

$$\begin{aligned} 11/3 + 11/6 + 2 &= (11 \times 2) / (3 \times 2) + (11 \times 1) / (6 \times 1) + (2 \times 6) \\ &= (22 + 11 + 12) / 6 \\ &= 45 / 6 \\ &= 15 / 2 \end{aligned}$$

$$\begin{array}{r} 2 \overline{) 15} \phantom{0} \\ \underline{14} \phantom{0} \\ 1 \phantom{0} \end{array}$$

$$= 7\frac{1}{2}$$