2.9.21 Thursday

Date
Page

# Exercise - 9 (B)

1) Add.

a. $\frac{5}{6} + \frac{7}{12}$

| | |
|---|---|
| 3 | 6, 12 |
| 2 | 2, 4 |
| 2 | 1, 2 |
| | 1, 1 |

L.C.M = 12

$\frac{5 \times 2 + 7 \times 1}{12} = \frac{10 + 7}{12} = \frac{17}{12}$

b. $\frac{4}{5} + \frac{3}{10} + \frac{1}{2}$

| | |
|---|---|
| 2 | 5, 10, 2 |
| 5 | 5, 5, 1 |
| | 1, 1, 1 |

L.C.M = 10

$\frac{4 \times 2 + 3 \times 1 + 1 \times 5}{10}$

$= \frac{8 + 3 + 5}{10} = \frac{16}{10}$

c. $\frac{5}{6} + \frac{7}{12} + \frac{5}{24}$

$\frac{5\times4 + 7\times2 + 5\times1}{24}$

$= \frac{20+14+5}{24} = \frac{39}{24}$

| | |
|---|---|
| 2 | 6, 12, 24 |
| 3 | 3, 6, 12 |
| 2 | 1, 2, 4 |
| 2 | 1, 1, 2 |
| | 1, 1, 1 |

L.C.M = 24

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

L.C.M = 2 X 5 X 7 = 70

As 2, 5 and 7 are prime numbers

$\frac{2\times10 + 3\times14 + 1\times35}{70}$

$= \frac{20+42+35}{70} = \frac{97}{70}$

e. $\frac{5}{16} + \frac{7}{10} + \frac{2}{5}$

$\frac{5\times5 + 7\times8 + 2\times16}{80}$

$= \frac{25+56+32}{80} = \frac{113}{80}$

| | |
|---|---|
| 2 | 16, 10, 5 |
| 5 | 8, 5, 5 |
| 2 | 8, 1, 1 |
| 2 | 4, 1, 1 |
| 2 | 2, 1, 1 |
| | 1, 1, 1 |

L.C.M = 80

f. $\frac{16}{25} + \frac{9}{10} + \frac{3}{8}$

$\frac{16\times8 + 9\times20 + 3\times25}{200}$

$= \frac{128+180+75}{200} = \frac{383}{200}$

| | |
|---|---|
| 5 | 25, 10, 8 |
| 5 | 5, 2, 8 |
| 2 | 1, 2, 8 |
| 2 | 1, 1, 4 |
| 2 | 1, 1, 2 |
| | 1, 1, 1 |

L.C.M = 200

g. $1\frac{1}{4} + 3\frac{3}{8} = \frac{5}{4} + \frac{27}{8}$

| | |
|---|---|
| 2 | 4, 8 |
| 2 | 2, 4 |
| 2 | 1, 2 |
| | 1, 1 |

$$\frac{5 \times 2 + 27 \times 1}{8}$$

L.C.M = 8

$$= \frac{10 + 27}{8} = \frac{37}{8} = 4\frac{5}{8}$$

h. $3\frac{1}{3} + 7\frac{5}{6} + 5\frac{1}{2} = \frac{10}{3} + \frac{42}{6} + \frac{11}{2}$

$$\frac{10\times2 + 42\times1 + 11\times3}{6}$$

$$= \frac{20 + 42 + 33}{6} = \frac{95}{6} = 15\frac{5}{6}$$

| | |
|---|---|
| 2 | 3, 6, 2 |
| 3 | 3, 3, 1 |
| | 1, 1, 1 |

L.C.M = 6

i. $6\frac{5}{14} + 20 + 7\frac{3}{7} + 8\frac{7}{12}$

L.C.M of 14, 7 and 12 = 84

$$= \frac{89}{14} + \frac{20}{1} + \frac{52}{7} + \frac{103}{12}$$

$$= \frac{534 + 1680 + 624 + 721}{84} = \frac{3559}{84} = 42\frac{31}{84}$$