

Proper fractions — Numerator smaller than Denominator.

Examples —

$$\frac{1}{2}, \frac{3}{5}, \frac{5}{9}$$

Improper fractions — Denominator smaller than numerator.

Examples — $\frac{2}{2}, \frac{5}{2}, \frac{7}{3}$

Mixed fractions — ~~is~~,

A fraction made up of a whole number and a proper fraction is a mixed fraction.

Examples — $2\frac{1}{2}, 4\frac{1}{5}$

Integral part — The whole number part is called the integral part.

Fractional part — The fraction is called the fractional part.

Example $\rightarrow 7\frac{2}{5} -$

Integral part = 7

Fractional part = $\frac{2}{5}$

Exe - 7-A

Q2- Fill in the blanks —

③ $\frac{1}{2}$ of 36

sol-

$$\frac{1}{2} \times 36 = 18$$

④ $\frac{1}{3}$ of 45

sol-

$$\frac{1}{3} \times 45 = 15$$

⑤ $\frac{1}{4}$ of 128

sol-

$$\frac{1}{4} \times 128 = 32$$

⑥ $\frac{1}{7}$ of 105

$$\text{sol- } \frac{1}{7} \times 105$$

$$= 15$$

⑦ $\frac{2}{3}$ of 39

$$\text{sol- } \frac{2}{3} \times 39$$

$$= 26$$

⑧ $\frac{3}{4}$ of 100

$$\text{sol- } \frac{3}{4} \times 100$$

$$= 75$$

③

(g) $\frac{7}{12}$ of 108

Sol-

$$\frac{7}{12} \times 108$$

$$= 63$$

ch) $\frac{9}{16}$ of 144

Sol-

$$\frac{9}{16} \times 144$$

$$= 81$$

$$a) \frac{56}{12}$$

$$\text{sol} - \frac{04}{12} \overline{) 56} \\ \underline{48} \\ 08$$

$$\text{Ans} = 4\frac{8}{12}$$

$$g) \frac{97}{11}$$

$$\text{sol} - \frac{08}{11} \overline{) 97} \\ \underline{88} \\ 09$$

$$\text{Ans} = 8\frac{9}{11}$$

Q7- Change into improper fraction.

$$a) 7\frac{4}{9}$$

$$b) 7\frac{5}{11}$$

$$\text{sol} -$$

$$= \frac{7 \times 9 + 4}{9}$$

$$= \frac{7 \times 11 + 5}{11}$$

$$= \frac{63 + 4}{9} = \frac{67}{9} \text{ Ans}$$

$$= \frac{77 + 5}{11}$$

$$b) 8\frac{7}{10}$$

$$\text{sol} -$$

$$= \frac{8 \times 10 + 7}{10}$$

$$= \frac{82}{10} \text{ Ans.}$$

$$b) 9\frac{1}{4}$$

$$\text{sol} -$$

$$= \frac{9 \times 4 + 1}{4}$$

$$= \frac{36 + 1}{4}$$

$$g) 20\frac{1}{5}$$

$$\text{sol} -$$

$$= \frac{20 \times 5 + 1}{5}$$

$$= \frac{100 + 1}{5} = \frac{101}{5} \text{ Ans}$$

$$= \frac{37}{4} \text{ Ans.}$$

$$= \frac{101}{5} \text{ Ans}$$

"You can't cross the sea merely by standing and staring at the water." - Rabindranath Tagore

V B - MATHS

Book Work

Exc - 7A

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Q1. (a) $\frac{1}{3}$ (b) $\frac{3}{4}$ (c) $\frac{2}{3}$ (d) $\frac{1}{2}$

Tick (✓) the fraction.

Q2 - completed in copy.

Q3 - Choose and write the like fractions

(a) $\frac{3}{7}, \frac{4}{7}$

(b) $\frac{4}{13}, \frac{6}{13}$

(c) $\frac{11}{21}, \frac{13}{21}, \frac{17}{21}$

$\frac{7}{9}, \frac{12}{21}, \frac{35}{53}$

Q4 - Proper fractions -

$\frac{7}{6}, \frac{7}{7}, \frac{12}{11}$

Improper fractions -

$\frac{4}{3}, \frac{6\frac{2}{5}}, \frac{11}{12}$

Q5 - (a) Ans -

$12\frac{9}{13}$

(b) Ans -

$\frac{15}{37}$

$5\frac{13}{14}$

(c) Ans -

Q. Change into mixed fraction.

Q. $\frac{9}{4}$

Sol- $4 \overline{) \frac{9}{8}}$

Ans = $2 \frac{1}{4}$

Q. $\frac{7}{3}$

Sol- $5 \overline{) \frac{7}{2}}$

Ans = $1 \frac{2}{5}$

Q. $1 \frac{3}{7}$

Sol- $7 \overline{) \frac{12}{07}}$

Ans = $1 \frac{5}{7}$

Q. $\frac{35}{8}$

Sol- $8 \overline{) \frac{35}{03}}$

Ans = $4 \frac{3}{8}$

Q. $\frac{42}{15}$

Sol- $15 \overline{) \frac{42}{02}}$

Ans = $2 \frac{12}{15}$

V B. maths

Exc. 7-B

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Q1, Q2 and Q3 we will do in book.

Q4:- Change to like fractions

(a) $\frac{2}{3}$ and $\frac{3}{5}$

Sol -

The L.C.M. of 3 and 5 = 15

$$15 \div 3 = 5$$

$$15 \div 5 = 3$$

$$\frac{2 \times 5}{3 \times 5} = \frac{10}{15}, \quad \frac{3 \times 3}{5 \times 3} = \frac{9}{15}$$

$$\text{Ans} = \frac{10}{15}, \frac{9}{15}$$

(b) $\frac{3}{4}$ and $\frac{5}{7}$

Sol -

The L.C.M. of 4 and 7 = 28

$$28 \div 4 = 7$$

$$28 \div 7 = 4$$

$$\frac{3 \times 7}{4 \times 7} = \frac{21}{28}, \quad \frac{5 \times 4}{7 \times 4} = \frac{20}{28}$$

$$\text{Ans} = \frac{21}{28}, \frac{20}{28}$$

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③ $\frac{4}{15}, \frac{5}{12}$

Sol. -

The L.C.M. of 15 and 12 = 60

$$60 \div 15 = 4$$

$$60 \div 12 = 5$$

$$\frac{4 \times 4}{15 \times 4} = \frac{16}{60}, \quad \frac{5 \times 5}{12 \times 5} = \frac{25}{60}$$

$$\text{Ans} = \frac{16}{60}, \frac{25}{60}$$

④ $\frac{7}{8}$ and $\frac{7}{16}$

Sol. -

The L.C.M. of 8 and 16 = 16

$$16 \div 8 = 2$$

$$16 \div 16 = 1$$

$$\frac{7 \times 2}{8 \times 2} = \frac{14}{16}, \quad \frac{7 \times 1}{16 \times 1} = \frac{7}{16}$$

$$\text{Ans} = \frac{14}{16}, \frac{7}{16}$$

Q) $\frac{8}{9}$ and $\frac{6}{11}$

Sol. The L.C.M. of 9 and 11 = 99

$$99 \div 9 = 11$$

$$99 \div 11 = 9$$

$$\frac{8 \times 11}{9 \times 11} = \frac{88}{99}, \quad \frac{6 \times 9}{11 \times 9} = \frac{54}{99}$$

Ans = $\frac{88}{99}, \frac{54}{99}$

Q) $\frac{4}{13}$ and $\frac{5}{9}$

Sol. The L.C.M. of 13 and 9 = 117

$$117 \div 13 = 9$$

$$117 \div 9 = 13$$

$$\frac{4 \times 9}{13 \times 9} = \frac{36}{117}, \quad \frac{5 \times 13}{9 \times 13} = \frac{65}{117}$$

Ans = $\frac{36}{117}, \frac{65}{117}$

(2)

Q10) $\frac{5}{12}, \frac{5}{11}, \frac{5}{9}, \frac{5}{13}, \frac{5}{10}$

Sol - $\frac{5}{13}, \frac{5}{12}, \frac{5}{11}, \frac{5}{10}, \frac{5}{9}$

Q11 - Arrange in ascending order.

Q12) $\frac{2}{3}, \frac{5}{6}, \frac{7}{9}$

Sol -> First we will change to like fractions.

The L.C.M. of 3, 6 and 9 = 18

$$18 \div 3 = 6$$

$$18 \div 6 = 3$$

$$18 \div 9 = 2$$

$$\frac{2 \times 6}{3 \times 6} = \frac{12}{18}, \quad \frac{5 \times 3}{6 \times 3} = \frac{15}{18}, \quad \frac{7 \times 2}{9 \times 2} = \frac{14}{18}$$

Ascending order - $\frac{12}{18}, \frac{14}{18}, \frac{15}{18}$

Ans = $\frac{2}{3}, \frac{7}{9}, \frac{5}{6}$

Q9 - Write in descending order.

③ $\frac{2}{9}, \frac{6}{9}, \frac{7}{9}, 1\frac{4}{9}$

Sol - $1\frac{4}{9}, \frac{7}{9}, \frac{6}{9}, \frac{2}{9}$

⑤ $\frac{15}{13}, \frac{15}{17}, \frac{15}{19}, \frac{15}{21}, \frac{15}{16}$

Sol - $\frac{15}{13}, \frac{15}{16}, \frac{15}{17}, \frac{15}{19}, \frac{15}{21}$

⑦ $\frac{11}{17}, 3\frac{1}{17}, \frac{19}{17}, 2\frac{2}{17}, \frac{65}{17}$

Sol - $\frac{65}{17}, 3\frac{1}{17}, 2\frac{2}{17}, \frac{19}{17}, \frac{11}{17}$

Q10 - Write in ascending order.

③ $\frac{6}{7}, \frac{5}{7}, \frac{4}{7}, 2\frac{3}{7}, 1\frac{5}{7}$

Sol - $\frac{4}{7}, \frac{5}{7}, \frac{6}{7}, \frac{15}{7}, 2\frac{3}{7}$

⑤ $\frac{14}{21}, \frac{17}{21}, \frac{12}{21}, \frac{22}{21}, 1\frac{2}{21}$

Sol - $\frac{12}{21}, \frac{14}{21}, \frac{17}{21}, \frac{22}{21}, 1\frac{2}{21}$

V-B, MATHS.

Ex. 7-B,

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Q5. Are the fractions equivalent?

Q5. a) $\frac{5}{6}$ and $\frac{15}{12}$

Sol. $\frac{5}{6} \times \frac{2}{2} = \frac{10}{12}$

b) $\frac{3}{4}$ and $\frac{12}{16}$

Sol. $\frac{3}{4} \times \frac{3}{3} = \frac{9}{12}$

$5 \times 12 = 60$, $6 \times 15 = 90$

No, $\frac{5}{6}$ and $\frac{15}{12}$ are

not equivalent.

$3 \times 16 = 48$, $4 \times 12 = 48$

Yes, $\frac{3}{4}$ and $\frac{12}{16}$ are

equivalent.

Q6. c) $\frac{30}{75}$ and $\frac{2}{5}$

Sol. $\frac{30}{75} \times \frac{2}{2} = \frac{60}{150}$

$30 \times 5 = 150$, $75 \times 2 = 150$

Yes, $\frac{30}{75}$ and $\frac{2}{5}$ are

equivalent.

d) $\frac{19}{38}$ and $\frac{1}{2}$

Sol. $\frac{19}{38} \times \frac{1}{1} = \frac{19}{38}$

$19 \times 2 = 38$, $38 \times 1 = 38$

Yes, $\frac{19}{38}$ and $\frac{1}{2}$ are equivalent.

Sol. $\frac{39}{49} \times \frac{3}{3} = \frac{117}{147}$

$39 \times 7 = 273$, $49 \times 3 = 147$

No, $\frac{39}{49}$ and $\frac{3}{7}$ are

not equivalent.

e) $\frac{32}{40}$ and $\frac{4}{5}$

Sol. $\frac{32}{40} \times \frac{4}{4} = \frac{128}{160}$

$32 \times 5 = 160$, $40 \times 4 = 160$

Yes, $\frac{32}{40}$ and $\frac{4}{5}$ are equivalent.

Date ____/____/____

Q.13 - Reduce the fractions to lowest terms

(a) $\frac{3}{9}$

sol - $\frac{3 \div 3}{9 \div 3} = \frac{1}{3}$ Ans.

(b) $\frac{8}{18}$

sol - $\frac{8 \div 2}{18 \div 2} = \frac{4}{9}$ Ans.

(c) $\frac{21}{14}$

sol - $\frac{21 \div 7}{14 \div 7} = \frac{3}{2}$ Ans.

(d) $\frac{30}{75}$

sol - $\frac{30 \div 15}{75 \div 15} = \frac{2}{5}$ Ans.

(e) $\frac{144}{80}$

sol - $\frac{144 \div 16}{80 \div 16} = \frac{9}{5}$ Ans.

Descending order = $\frac{33}{36}, \frac{32}{36}, \frac{30}{36}, \frac{24}{36}$

Ans = $\frac{11}{12}, \frac{8}{9}, \frac{5}{6}, \frac{2}{3}$

Q) $\frac{17}{20}, \frac{7}{10}, \frac{3}{4}, \frac{5}{8}$

Sol -

The L.C.M. of 20, 10, 4 and 8 = 40

$\frac{17 \times 2}{20 \times 2} = \frac{34}{40}, \frac{7 \times 4}{10 \times 4} = \frac{28}{40}, \frac{3 \times 10}{4 \times 10} = \frac{30}{40}, \frac{5 \times 5}{8 \times 5} = \frac{25}{40}$

Descending order = $\frac{34}{40}, \frac{30}{40}, \frac{28}{40}, \frac{25}{40}$

Ans = $\frac{17}{20}, \frac{3}{4}, \frac{7}{10}, \frac{5}{8}$

Exc. 7-B. ~~Q11~~

Q11) $\frac{4}{5}, \frac{9}{10}, \frac{2}{5}, \frac{13}{15}$

Sol - The L.C.M. of 5, 10, 5 and 15 = 30

$\frac{4 \times 6}{5 \times 6} = \frac{24}{30}, \frac{9 \times 3}{10 \times 3} = \frac{27}{30}, \frac{2 \times 6}{5 \times 6} = \frac{12}{30}, \frac{13 \times 2}{15 \times 2} = \frac{26}{30}$

Ascending order = $\frac{12}{30}, \frac{24}{30}, \frac{26}{30}, \frac{27}{30}$

Ans = $\frac{2}{5}, \frac{4}{5}, \frac{13}{15}, \frac{9}{10}$

$\frac{33}{36}$

Q11 (b) $\frac{5}{8}, \frac{3}{4}, \frac{7}{8}, \frac{2}{4}$

Sol —

The L.C.M. of 8, 4, 8 and 4 = 8

$$\frac{5 \times 1}{8 \times 1} = \frac{5}{8}, \quad \frac{3 \times 2}{4 \times 2} = \frac{6}{8}, \quad \frac{7 \times 1}{8 \times 1} = \frac{7}{8}, \quad \frac{2 \times 2}{4 \times 2} = \frac{4}{8}$$

Ascending order = $\frac{4}{8}, \frac{5}{8}, \frac{6}{8}, \frac{7}{8}$

Ans = $\frac{2}{4}, \frac{5}{8}, \frac{3}{4}, \frac{7}{8}$

Q12 Arrange in descending order.

(a) $\frac{2}{4}, \frac{7}{8}, \frac{3}{8}$

Sol —

The L.C.M. of 4, 8 and 8 = 8

$$\frac{2 \times 2}{4 \times 2} = \frac{4}{8}, \quad \frac{7 \times 1}{8 \times 1} = \frac{7}{8}, \quad \frac{3 \times 1}{8 \times 1} = \frac{3}{8}$$

Descending order = $\frac{7}{8}, \frac{4}{8}, \frac{3}{8}$

Ans = $\frac{7}{8}, \frac{2}{4}, \frac{3}{8}$

(b) $\frac{2}{3}, \frac{5}{6}, \frac{8}{9}, \frac{11}{12}$

Sol —

The L.C.M. of 3, 6, 9 and 12 = 36

$$\frac{2 \times 12}{3 \times 12} = \frac{24}{36}, \quad \frac{5 \times 6}{6 \times 6} = \frac{30}{36}, \quad \frac{8 \times 4}{9 \times 4} = \frac{32}{36}, \quad \frac{11 \times 3}{12 \times 3} = \frac{33}{36}$$

Q8 - Fill in the greatest digit to make the number divisible by 3.

Q 53□

Sol -

$$\begin{array}{r} 17 \\ 3 \overline{) 53} \\ \underline{3} \\ 23 \\ \underline{21} \\ 02 \end{array}$$

Now, we will see that which greatest number we can use.

9, No

8, No

7, Yes

If we will keep 7 after 53, it will become 537, 537 is divisible by 3.

or

A number is divisible by 3 if the sum of its digits is divisible by 3.

$$\cancel{5+3+9} = 5+3+7 = 15$$

15 is divisible by 3

Q14 Which of these are in lowest terms

(a) $\frac{3}{11}$ (b) $\frac{5}{20}$, $\frac{25}{36}$, $\frac{40}{41}$, $\frac{72}{61}$

Sol → $\frac{3}{11}$ can not be reduced. So it is in lowest terms.

(b) Sol → $\frac{5}{20} = \frac{1}{4}$

$\frac{5}{20}$ can be reduced. So it is not in lowest terms.

(c) Sol → $\frac{25}{36}$ can not be reduced. So it is in lowest terms.

(d) Sol → $\frac{40}{41}$ can not be reduced. So it is in lowest terms.

(e) Sol → $\frac{72}{61}$ can not be reduced. So, it is in lowest terms.

Add -

Q1(a) $\frac{2}{7} + \frac{3}{7}$

Sol -

$$= \frac{2+3}{7}$$

$$= \frac{5}{7} \text{ Ans.}$$

(b) $\frac{4}{15} + \frac{8}{15}$

Ans -

$$= \frac{4+8}{15}$$

$$= \frac{12}{15} = \frac{4}{5} \text{ Ans.}$$

(c) $\frac{4}{13} + \frac{6}{13}$

Sol -

$$= \frac{4+6}{13}$$

$$= \frac{10}{13} \text{ Ans.}$$

(d) $\frac{7}{24} + \frac{5}{24}$

Sol -

$$= \frac{7+5}{24}$$

$$= \frac{12}{24} = \frac{1}{2} \text{ Ans.}$$

Q2(a) $\frac{3}{8} + \frac{5}{8}$

Sol -

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

$$= \frac{8}{8} = 1 \text{ Ans.}$$

(b) $\frac{7}{10} + \frac{9}{10}$

Sol -

$$= \frac{7+9}{10}$$

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

$$= 1\frac{3}{5} \text{ Ans.}$$

(c) $\frac{13}{15} + \frac{7}{15}$

Sol -

$$= \frac{13+7}{15}$$

$$= \frac{20}{15} = \frac{4}{3} = 1\frac{1}{3} \text{ Ans.}$$

(d) $\frac{87}{100} + \frac{23}{100}$

Sol -

$$= \frac{87+23}{100}$$

$$= \frac{110}{100} = 1\frac{1}{10} \text{ Ans.}$$

Q3 (a) $1\frac{3}{8} + 2\frac{1}{8}$

Sol $\rightarrow = \frac{11}{8} + \frac{17}{8}$

$= \frac{11+17}{8}$

$= \frac{28}{8} = \frac{7}{2}$

$= 3\frac{1}{2} \text{ Ans.}$

(b) $\frac{5}{6} + 3\frac{1}{6}$

Sol $\rightarrow = \frac{5}{6} + \frac{19}{6}$

$= \frac{5+19}{6}$

$= \frac{24}{6} = 4 \text{ Ans.}$

(c) $5\frac{7}{8} + \frac{3}{8}$

Sol $\rightarrow = \frac{47}{8} + \frac{3}{8}$

$= \frac{47+3}{8} = \frac{50}{8}$

$= 25 = 6\frac{1}{4} \text{ Ans.}$

(d) $\frac{19}{20} + 4\frac{11}{20}$

Sol $\rightarrow = \frac{19}{20} + \frac{331}{20}$

$= \frac{19+331}{20}$

$= \frac{350}{20} = 4\frac{3}{8} \text{ Ans.}$

Q4 - Subtract —

(a) $\frac{8}{15} - \frac{2}{15}$

Sol $\rightarrow = \frac{8-2}{15}$

$= \frac{6}{15} = \frac{2}{5} \text{ Ans.}$

(b) $\frac{19}{15} - \frac{7}{15}$

Sol $\rightarrow = \frac{19-7}{15}$

$= \frac{12}{15} = \frac{4}{5} \text{ Ans.}$

(9)

$$26 \text{ (b)} \quad 3\frac{2}{27} + 1\frac{5}{27} + \frac{20}{27}$$

$$\text{Sol} \rightarrow \frac{83}{27} + \frac{32}{27} + \frac{20}{27}$$

$$= \frac{83+32+20}{27}$$

$$= \frac{135}{27} = 5 \text{ Ans.}$$

$$27 \quad 10\frac{1}{70} + \frac{48}{70} + \frac{9}{70}$$

$$\text{Sol} \rightarrow = \frac{701}{70} + \frac{48}{70} + \frac{9}{70}$$

$$= \frac{701+48+9}{70}$$

$$= \frac{758}{70}$$

$$= 10\frac{35}{35}$$

$$= \frac{379}{35}$$

$$= 10\frac{29}{35} \text{ Ans.}$$

Q 4 (c) — $2\frac{4}{9} - \frac{7}{9}$

Sol —

$$= \frac{22}{9} - \frac{7}{9}$$

$$= \frac{22-7}{9}$$

$$= \frac{15}{9} = \frac{5}{3}$$

$$= 1\frac{2}{3} \text{ Ans}$$

Q 5 (b) $10\frac{5}{18} - 5\frac{7}{18}$

Sol — $\frac{185}{18} - \frac{97}{18}$

$$= \frac{185-97}{18} = \frac{88}{18}$$

$$= \frac{44}{9} = 4\frac{8}{9} \text{ Ans}$$

Q 5 Add —

Q 6 (a) $\frac{4}{35} + \frac{8}{35} + \frac{3}{35}$

Sol — $= \frac{4+8+3}{35}$

$$= \frac{15}{35} = \frac{3}{7} \text{ Ans}$$

Q 5 (b) $\frac{21}{60} + \frac{17}{60} + \frac{7}{60}$

Sol — $= \frac{21+17+7}{60}$

$$= \frac{45}{60} = \frac{3}{4} \text{ Ans}$$

Q 6 (b) $\frac{4}{51} + \frac{24}{51} + \frac{23}{51}$

Sol — $= \frac{4+24+23}{51}$

$$= \frac{51}{51} = 1 \text{ Ans}$$

Q 6 (c) $1\frac{4}{35} + 2\frac{8}{35} + 3\frac{3}{35}$

Sol — $= \frac{39}{35} + \frac{78}{35} + \frac{103}{35}$

$$= \frac{39+78+108}{35}$$

$$= \frac{225}{35}$$

$$= \frac{45}{7} = 6\frac{3}{7} \text{ Ans}$$

Q2 Add -

$$(a) \frac{2}{3} + \frac{1}{6}$$

Sol - The L.C.M. of 3 and 6 = 6
 $6 \div 3 = 2$
 $6 \div 6 = 1$

$$= \frac{2 \times 2 + 1 \times 1}{6}$$

$$= \frac{4 + 1}{6} = \frac{5}{6} \text{ Ans.}$$

$$(b) \frac{3}{10} + \frac{7}{30}$$

Sol - The L.C.M. of 10 and 30 = 30
 $30 \div 10 = 3$
 $30 \div 30 = 1$

$$= \frac{3 \times 3 + 7 \times 1}{30}$$

$$= \frac{9 + 7}{30} = \frac{16}{30} = \frac{8}{15} \text{ Ans.}$$

$$(c) \frac{7}{16} + \frac{3}{8}$$

Sol - The L.C.M. of 16 and 8 = 16
 $16 \div 16 = 1$
 $16 \div 8 = 2$

Qd.

$$\textcircled{a} \quad \frac{5}{12} + \frac{19}{6}$$

Sol —

The L.C.M. of 12 and 6 = 12

$$12 \div 12 = 1$$

$$12 \div 6 = 2$$

$$= \frac{5 \times 1 + 19 \times 2}{12}$$

$$= \frac{5 + 38}{12} = \frac{43}{12} \text{ Ans.}$$

$$\textcircled{b} \quad \frac{7}{6} + \frac{14}{9}$$

Sol —

The L.C.M. of 6 and 9 = 18

$$18 \div 6 = 3$$

$$18 \div 9 = 2$$

$$= \frac{7 \times 3 + 14 \times 2}{18}$$

$$= \frac{21 + 28}{18}$$

$$= \frac{49}{18} \text{ Ans.}$$

Q1- Convert into like fractions and add. (d)

(a) $\frac{1}{3} + \frac{1}{4}$

Sol- The L.C.M. of 3 and 4 = 12
 $12 \div 3 = 4$
 $12 \div 4 = 3$

$$= \frac{1 \times 4 + 1 \times 3}{12}$$

$$= \frac{4+3}{12} = \frac{7}{12} \text{ Ans.}$$

(b) $\frac{1}{4} + \frac{3}{8}$

Sol- The L.C.M. of 4 and 8 = 8
 $8 \div 4 = 2$
 $8 \div 8 = 1$

$$= \frac{1 \times 2 + 3 \times 1}{8}$$

$$= \frac{2+3}{8} = \frac{5}{8} \text{ Ans.}$$

(c) $\frac{4}{9} + \frac{1}{3}$

Sol- The L.C.M. of 9 and 3 = 9
 $9 \div 9 = 1$
 $9 \div 3 = 3$

$$= \frac{4 \times 1 + 1 \times 3}{9}$$

$$= \frac{4+3}{9} = \frac{7}{9} \text{ Ans.}$$

"You can't cross the sea merely by standing and staring at the water," - Rabindranath Tagor

⑥

Q 4 (c) $\frac{31}{32} + \frac{5}{48}$

Sol —

The L.C.M. of 32 and 48 = 96

$$96 \div 32 = 3$$

$$96 \div 48 = 2$$

$$= \frac{31 \times 3 + 5 \times 2}{96}$$

$$= \frac{93 + 10}{96} = \frac{103}{96} \text{ Ans.}$$

(d) $\frac{25}{15} + \frac{4}{25}$

Sol —

The L.C.M. of 15 and 25 = 75

$$75 \div 15 = 5$$

$$75 \div 25 = 3$$

$$= \frac{25 \times 5 + 4 \times 3}{75}$$

$$= \frac{125 + 12}{75} = \frac{137}{75} \text{ Ans.}$$

Q 5 (a) $\frac{1}{12} + \frac{1}{6} + \frac{1}{3}$

Sol —

The L.C.M. of 12, 6 and 3 = 12

$$12 \div 12 = 1$$

$$12 \div 6 = 2$$

$$12 \div 3 = 4$$

$$= \frac{1 \times 1 + 1 \times 2 + 1 \times 4}{12}$$

$$= \frac{1 + 2 + 4}{12} = \frac{7}{12} \text{ Ans.}$$

"You have to take the calculated risk, to win something." — Dhirubhai Ambani

Q3 (a) $\frac{2}{3} + \frac{3}{11}$

Sol - The L.C.M. of 3 and 11 = 33

$$33 \div 3 = 11$$

$$33 \div 11 = 3$$

$$= \frac{2 \times 11 + 3 \times 3}{33}$$

$$= \frac{22 + 9}{33} = \frac{31}{33} \text{ Ans.}$$

Q4 (a) $\frac{5}{12} + \frac{2}{9}$

Sol - The L.C.M. of 12 and 9 = 36

$$36 \div 12 = 3$$

$$36 \div 9 = 4$$

$$= \frac{5 \times 3 + 2 \times 4}{36}$$

$$= \frac{15 + 8}{36} = \frac{23}{36} \text{ Ans.}$$

(b) $\frac{7}{18} + \frac{20}{27}$

Sol - The L.C.M. of 18 and 27 = 54

$$54 \div 18 = 3$$

$$54 \div 27 = 2$$

$$= \frac{7 \times 3 + 20 \times 2}{54}$$

$$= \frac{21 + 40}{54} = \frac{61}{54} \text{ Ans.}$$

(4)

$$Q2 \text{ (d)} \quad \frac{9}{20} + \frac{2}{5}$$

Sol — The L.C.M. of 20 and 5 = 20

$$20 \div 20 = 1$$

$$20 \div 5 = 4$$

$$= \frac{9 \times 1 + 2 \times 4}{20}$$

$$= \frac{9+8}{20} = \frac{17}{20} \text{ Ans.}$$

$$Q3 \text{ (a)} \quad \frac{1}{2} + \frac{1}{3}$$

Sol — The L.C.M. of
2 and 3 = 6

$$6 \div 2 = 3$$

$$6 \div 3 = 2$$

$$= \frac{1 \times 3 + 1 \times 2}{6}$$

$$= \frac{3+2}{6} = \frac{5}{6} \text{ Ans.}$$

$$(b) \quad \frac{3}{5} + \frac{1}{4}$$

Sol —

The L.C.M. of
5 and 4 = 20

$$20 \div 5 = 4$$

$$20 \div 4 = 5$$

$$= \frac{3 \times 4 + 1 \times 5}{20}$$

$$= \frac{12+5}{20}$$

$$= \frac{17}{20} \text{ Ans.}$$

$$(c) \quad \frac{3}{7} + \frac{4}{9}$$

Sol —

The L.C.M. of 7 and 9 = 63

$$63 \div 7 = 9$$

$$63 \div 9 = 7$$

$$= \frac{3 \times 9 + 4 \times 7}{63} = \frac{27+28}{63} = \frac{55}{63} \text{ Ans.}$$

"You have to take the calculated risk to earn something." — Dhruvhanil Sharma