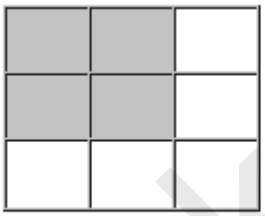
RS Aggrawal Solution for Class 6 Maths Chapter 5 Fractions

ANSWER:

(i) The shaded portion is 3 parts of the whole figure
∴34
(ii) The shaded portion is 1 parts of the whole figure
∴14
(iii) The shaded portion is 2 parts of the whole figure.
∴23
(iv) The shaded portion is 3 parts of the whole figure.
∴310
(v)The shaded portion is 4 parts of the whole figure.
∴49
(vi) The shaded portion is 3 parts of the whole figure.
∴ 38

Page No 82:

ANSWER:



Page No 82:

ANSWER:

The given rectangle is not divided into four equal parts.

Thus, the shaded region is not equal to 1414 of the whole.

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ANSWER:

(i) $\frac{3}{4}$34 (ii) $\frac{4}{7}$47 (iii) $\frac{2}{5}$25 (iv) $\frac{3}{10}$310 (v) $\frac{1}{8}$18
(vi) $\frac{5}{6}$56 (vii)$\frac{8}{9}$89 (viii) $\frac{7}{12}$712

Page No 83:

ANSWER:

	Numerator	Denominator
(i)	4	9
(ii)	6	11
(iii)	8	15
(iv)	12	17
(v)	5	1

Page No 83:

ANSWER:

(i)$\frac{3}{8}$38 (ii) $\frac{5}{12}$512 (iii)$\frac{7}{16}$716 (iv) $\frac{8}{15}$815

Page No 83:

ANSWER:

(i) two-thirds
(ii) four—-ninths
(iii) two—-fifths
(iv) seven—-tenths
(v) one—-thirds
(vi) three—-fourths
(vii) three—-eighths
(viii) nine—-fourteenths
(ix) five—-elevenths
(x) six—-fifteenths

Page No 83:

ANSWER:

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We know: 1 hour = 60 minutes
∴ The required fraction = 2460=252460=25

Page No 83:

ANSWER:

There are total 9 natural numbers from 2 to 10. They are 2, 3, 4, 5, 6, 7, 8, 9, 10.
Out of these natural numbers, 2, 3, 5, 7 are the prime numbers.
∴ The required fraction = 4949.

Page No 83:

ANSWER:

(i) 2323 of 15 pens = (231×1551) = 10 pens231×1551 = 10 pens
(ii) 2323 of 27 balls = (231×2791) = 18 balls231×2791 = 18 balls
(iii) 2323 of 36 balloons = (231×361121) = 24 balloons231×36121 = 24 balloons

Page No 83:

ANSWER:

(i) 3434 of 16 cups = (341 × 1641) = 12 cups341 × 1641 = 12 cups
(ii) 3434 of 28 rackets = (341 × 2871) = 21 rackets341 × 2871 = 21 rackets
(iii) 3434 of 32 books = (341 × 3281) = 24 books341 × 3281 = 24 books

Page No 83:

ANSWER:

Neelam gives 4545 of 25 pencils to Meena.
(451 × 2551) = 20 Pencils 451 × 2551 = 20 Pencils
Thus, Meena gets 20 pencils.
∴ Number of pencils left with Neelam = 25 −- 20 = 5 pencils
Thus, 5 pencils are left with Neelam.

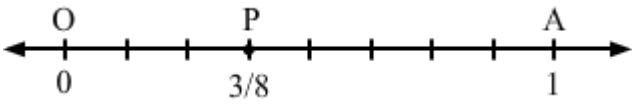
Page No 83:

ANSWER:

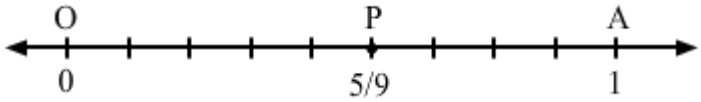
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Draw a 0 to 1 on a number line. Label point 1 as A and mark the starting point as 0.

(i) Divide the number line from 0 to 1 into 8 equal parts and take out 3 parts from it to reach point P.

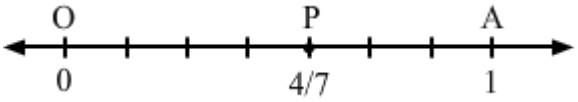


(ii) Divide the number line from 0 to 1 into 9 equal parts and take out 5 parts from it to reach point P

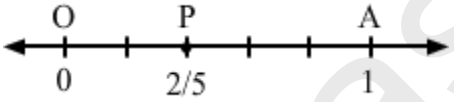


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(iii) Divide the number line from 0 to 1 into 7 equal parts and take out 4 parts from it to reach point P.



(Iv) Divide the number line from 0 to 1 into 5 equal parts and take out 2 parts from it to reach point P.



(v) Divide the number line from 0 to 1 into 4 equal parts and take out 1 part from it to reach point P.



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Page No 85:

ANSWER:

12, 35, 1011 12, 35, 1011

Page No 85:

ANSWER:

A fraction whose numerator is greater than or equal to its denominator is called an improper fraction. Hence, 32, 94, 88, 2716, 1918 and 2626 32, 94, 88, 2716, 1918 and 2626 are improper fractions.

Page No 85:

ANSWER:

Clearly, 65, 75, 85, 95, 115 and 125 65, 75, 85, 95, 115 and 125 are improper fractions, each with 5 as the denominator.

Page No 85:

ANSWER:

Clearly, 132, 133, 134, 135, 136, 137 132, 133, 134, 135, 136, 137 are improper fractions, each with 13 as the numerator.

Page No 85:

ANSWER:

We have:

(i) $5\frac{7}{5} = (5 \times 7) + 5 = 40$ $5\frac{7}{5} = (5 \times 7) + 5 = 40$

(ii) $9\frac{3}{8} = (9 \times 8) + 3 = 75$ $9\frac{3}{8} = (9 \times 8) + 3 = 75$

(iii) $6\frac{3}{10} = (6 \times 10) + 3 = 63$ $6\frac{3}{10} = (6 \times 10) + 3 = 63$

(iv) $3\frac{5}{11} = (3 \times 11) + 5 = 38$ $3\frac{5}{11} = (3 \times 11) + 5 = 38$

(v) $10\frac{9}{14} = (10 \times 14) + 9 = 149$ $10\frac{9}{14} = (10 \times 14) + 9 = 149$

(vi) $12\frac{7}{15} = (12 \times 15) + 7 = 187$ $12\frac{7}{15} = (12 \times 15) + 7 = 187$

(vii) $8\frac{8}{13} = (8 \times 13) + 8 = 112$ $8\frac{8}{13} = (8 \times 13) + 8 = 112$

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(viii) $51_{23} = (51 \times 3) + 23 = 1553$5123 = (51 × 3) + 23 = 1553

Page No 85:

ANSWER:

(i) On dividing 17 by 5, we get:
Quotient = 3
Remainder = 2
$\therefore 175 = 3_{+25} = 3_{25}$ 175 = 3 +25 = 325

(ii) On dividing 62 by 7, we get:
Quotient = 8
Remainder = 6
$\therefore 627 = 8_{+67} = 8_{67}$ 627 = 8 +67 = 867

(iii) On dividing 101 by 8, we get:
Quotient = 12
Remainder = 5
$\therefore 1018 = 12_{+58} = 12_{58}$ 1018 = 12 +58 = 1258

(iv) On dividing 95 by 13, we get:
Quotient = 7
Remainder = 4
$\therefore 9513 = 7_{+413} = 7_{413}$ 9513 = 7 +413 = 7413

(v) On dividing 81 by 11, we get:
Quotient = 7
Remainder = 4
$\therefore 8111 = 7_{+411} = 7_{411}$ 8111 = 7 +411 = 7411

(vi) On dividing 87 by 16, we get:
Quotient = 5
Remainder = 7
$\therefore 8716 = 5_{+716} = 5_{716}$ 8716 = 5 +716 = 5716

(vii) On dividing 103 by 12, we get:
Quotient = 8
Remainder = 7
$\therefore 10312 = 8_{+712} = 8_{712}$ 10312 = 8 +712 = 8712

(viii) On dividing 117 by 20, we get:

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Quotient = 5
Remainder = 17
$\therefore 11720 = 5 + 1720 = 5\frac{17}{20}$ 11720 = 5 +1720 = 51720

Page No 85:

ANSWER:

An improper fraction is greater than 1. Hence, it is always greater than a proper fraction, which is less than 1.

(i) $\frac{1}{2} < 1\frac{1}{2} < 1$

(ii) $\frac{3}{4} < 1\frac{3}{4} < 1$

(iii) $1 > \frac{1}{67} > \frac{6}{7}$

(iv) $\frac{6}{6} = \frac{16}{6} = 1$

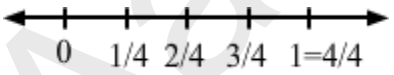
(v) $\frac{3016}{3016} = 1\frac{3016}{3016} = 1$

(vi) $\frac{11}{5} > 1\frac{1}{5} > 1$

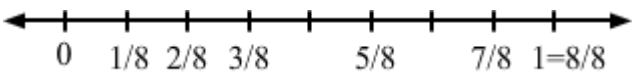
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ANSWER:

(i) Draw a number line. Mark 0 as the starting point and 1 as the ending point.
Then, divide 0 to 1 in four equal parts, where each part is equal to 1/4.
Show the consecutive parts as 1/4, 1/2, 3/4 and at 1 show 4/4 = 1.

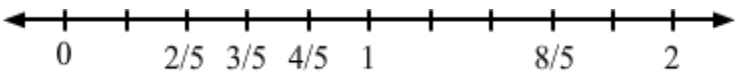


(ii) Draw 0 to 1 on a number line. Divide the segment into 8 equal parts, each part corresponds to 1/8. Show the consecutive parts as 1/8, 2/8, 3/8, 4/8, 5/8, 6/8, 7/8 and 8/8. Highlight the required ones only.



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(iii) Draw 0 to 2 on a number line. Divide the segment between 0 and 1 into 5 equal parts, where each part is equal to 1/5.
Show 2/5, 3/5, 4/5 and 8/5 3 parts away from 1 towards 2. (1 < 8/5 < 2)



Page No 89:

ANSWER:

(i) $\frac{2}{3} = \frac{2\times2}{3\times2} = \frac{2\times3}{3\times3} = \frac{2\times4}{3\times4} = \frac{2\times5}{3\times5} = \frac{2\times6}{3\times6}$ $\frac{2}{3} = \frac{2\times2}{3\times2} = \frac{2\times3}{3\times3} = \frac{2\times4}{3\times4} = \frac{2\times5}{3\times5} = \frac{2\times6}{3\times6}$

$\therefore \frac{2}{3} = \frac{4}{6} = \frac{6}{9} = \frac{8}{12} = \frac{10}{15} = \frac{12}{18}$ $\frac{2}{3} = \frac{4}{6} = \frac{6}{9} = \frac{8}{12} = \frac{10}{15} = \frac{12}{18}$

Hence, the five fractions equivalent to $\frac{2}{3}$ are $\frac{4}{6}, \frac{6}{9}, \frac{8}{12}, \frac{10}{15}$ and $\frac{12}{18}$ $\frac{4}{6}, \frac{6}{9}, \frac{8}{12}, \frac{10}{15}$ and $\frac{12}{18}$.

(ii)
$\frac{4}{5} = \frac{4\times2}{5\times2} = \frac{4\times3}{5\times3} = \frac{4\times4}{5\times4} = \frac{4\times5}{5\times5} = \frac{4\times6}{5\times6}$ $\frac{4}{5} = \frac{4\times2}{5\times2} = \frac{4\times3}{5\times3} = \frac{4\times4}{5\times4} = \frac{4\times5}{5\times5} = \frac{4\times6}{5\times6}$

$\therefore \frac{4}{5} = \frac{8}{10} = \frac{12}{15} = \frac{16}{20} = \frac{20}{25} = \frac{24}{30}$ $\frac{4}{5} = \frac{8}{10} = \frac{12}{15} = \frac{16}{20} = \frac{20}{25} = \frac{24}{30}$

Hence, the five fractions equivalent to $\frac{4}{5}$ are $\frac{8}{10}, \frac{12}{15}, \frac{16}{20}, \frac{20}{25}$ and $\frac{24}{30}$ $\frac{8}{10}, \frac{12}{15}, \frac{16}{20}, \frac{20}{25}$ and $\frac{24}{30}$.

(iii)
$\frac{5}{8} = \frac{5\times2}{8\times2} = \frac{5\times3}{8\times3} = \frac{5\times4}{8\times4} = \frac{5\times5}{8\times5} = \frac{5\times6}{8\times6}$ $\frac{5}{8} = \frac{5\times2}{8\times2} = \frac{5\times3}{8\times3} = \frac{5\times4}{8\times4} = \frac{5\times5}{8\times5} = \frac{5\times6}{8\times6}$

$\therefore \frac{5}{8} = \frac{10}{16} = \frac{15}{24} = \frac{20}{32} = \frac{25}{40} = \frac{30}{48}$ $\frac{5}{8} = \frac{10}{16} = \frac{15}{24} = \frac{20}{32} = \frac{25}{40} = \frac{30}{48}$

Hence, the five fractions equivalent to $\frac{5}{8}$ are $\frac{10}{16}, \frac{15}{24}, \frac{20}{32}, \frac{25}{40}$ and $\frac{30}{48}$ $\frac{10}{16}, \frac{15}{24}, \frac{20}{32}, \frac{25}{40}$ and $\frac{30}{48}$.

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(iv)

$\frac{7}{10} = \frac{7\times2}{10\times2} = \frac{7\times3}{10\times3} = \frac{7\times4}{10\times4} = \frac{7\times5}{10\times5} = \frac{7\times6}{10\times6}$ $\frac{7}{10} = \frac{7\times2}{10\times2} = \frac{7\times3}{10\times3} = \frac{7\times4}{10\times4} = \frac{7\times5}{10\times5} = \frac{7\times6}{10\times6}$

$\therefore \frac{7}{10} = \frac{14}{20} = \frac{21}{30} = \frac{28}{40} = \frac{35}{50} = \frac{42}{60}$ $\frac{7}{10} = \frac{14}{20} = \frac{21}{30} = \frac{28}{40} = \frac{35}{50} = \frac{42}{60}$

Hence, the five fractions equivalent to $\frac{7}{10}$ $\frac{7}{10}$ are $\frac{14}{20}$, $\frac{21}{30}$, $\frac{28}{40}$, $\frac{35}{50}$ and $\frac{42}{60}$ $\frac{14}{20}$, $\frac{21}{30}$, $\frac{28}{40}$, $\frac{35}{50}$ and $\frac{42}{60}$.

(v)

$\frac{3}{7} = \frac{3\times2}{7\times2} = \frac{3\times3}{7\times3} = \frac{3\times4}{7\times4} = \frac{3\times5}{7\times5} = \frac{3\times6}{7\times6}$ $\frac{3}{7} = \frac{3\times2}{7\times2} = \frac{3\times3}{7\times3} = \frac{3\times4}{7\times4} = \frac{3\times5}{7\times5} = \frac{3\times6}{7\times6}$

$\therefore \frac{3}{7} = \frac{6}{14} = \frac{9}{21} = \frac{12}{28} = \frac{15}{35} = \frac{18}{42}$ $\frac{3}{7} = \frac{6}{14} = \frac{9}{21} = \frac{12}{28} = \frac{15}{35} = \frac{18}{42}$

Hence, the five fractions equivalent to $\frac{3}{7}$ $\frac{3}{7}$ are $\frac{6}{14}$, $\frac{9}{21}$, $\frac{12}{28}$,$\frac{15}{35}$ and $\frac{18}{42}$ $\frac{6}{14}$, $\frac{9}{21}$, $\frac{12}{28}$,$\frac{15}{35}$ and $\frac{18}{42}$.

(vi)

$\frac{6}{11} = \frac{6\times2}{11\times2} = \frac{6\times3}{11\times3} = \frac{6\times4}{11\times4} = \frac{6\times5}{11\times5} = \frac{6\times6}{11\times6}$ $\frac{6}{11} = \frac{6\times2}{11\times2} = \frac{6\times3}{11\times3} = \frac{6\times4}{11\times4} = \frac{6\times5}{11\times5} = \frac{6\times6}{11\times6}$

$\therefore \frac{6}{11} = \frac{12}{22} = \frac{18}{33} = \frac{24}{44} = \frac{30}{55} = \frac{36}{66}$ $\frac{6}{11} = \frac{12}{22} = \frac{18}{33} = \frac{24}{44} = \frac{30}{55} = \frac{36}{66}$

Hence, the five fractions equivalent to $\frac{6}{11}$ $\frac{6}{11}$ are $\frac{12}{22}$, $\frac{18}{33}$, $\frac{24}{44}$, $\frac{30}{55}$ and $\frac{36}{66}$ $\frac{12}{22}$, $\frac{18}{33}$, $\frac{24}{44}$, $\frac{30}{55}$ and $\frac{36}{66}$.

(vii) $\frac{7}{9} = \frac{7\times2}{9\times2} = \frac{7\times3}{9\times3} = \frac{7\times4}{9\times4} = \frac{7\times5}{9\times5} = \frac{7\times6}{9\times6}$ $\frac{7}{9} = \frac{7\times2}{9\times2} = \frac{7\times3}{9\times3} = \frac{7\times4}{9\times4} = \frac{7\times5}{9\times5} = \frac{7\times6}{9\times6}$

$\therefore \frac{7}{9} = \frac{14}{18} = \frac{21}{27} = \frac{28}{36} = \frac{35}{45} = \frac{42}{54}$ $\frac{7}{9} = \frac{14}{18} = \frac{21}{27} = \frac{28}{36} = \frac{35}{45} = \frac{42}{54}$

Hence, the five fractions equivalent to $\frac{7}{9}$ $\frac{7}{9}$ are $\frac{14}{18}$, $\frac{21}{27}$, $\frac{28}{36}$, $\frac{35}{45}$ and $\frac{42}{54}$ $\frac{14}{18}$, $\frac{21}{27}$, $\frac{28}{36}$, $\frac{35}{45}$ and $\frac{42}{54}$.

(viii) $\frac{5}{12} = \frac{5\times2}{12\times2} = \frac{5\times3}{12\times3} = \frac{5\times4}{12\times4} = \frac{5\times5}{12\times5} = \frac{5\times6}{12\times6}$ $\frac{5}{12} = \frac{5\times2}{12\times2} = \frac{5\times3}{12\times3} = \frac{5\times4}{12\times4}$

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×4= 5×512×5 = 5×612×6

∴ 512 = 1024 = 1536 = 2048 = 2560= 3072512 = 1024 = 1536 = 2048 = 2560= 3072

Hence, the five fractions equivalent
to 512512 are 1024, 1536, 2048,2560 and 30721024, 1536, 2048,2560 and 3072.

Page No 89:

ANSWER:

The pairs of equivalent fractions are as follows:

(i) 56 and 2024 (2024 = 5×46×4)56 and 2024 2024 = 5×46×4

(ii) 38 and 1540 (1540 = 3×58×5)38 and 1540 1540 = 3×58×5

(iv) 29 and 1463 (1463 = 2×79×7)29 and 1463 1463 = 2×79×7

Page No 89:

ANSWER:

(i) Let 35 = 30 35 = 30
Clearly, 30 = 5 ×× 6
So, we multiply the numerator by 6.

∴ 35 = 3×65×6= 183035 = 3×65×6= 1830
Hence, the required fraction is 18301830.

(ii) Let 35 = 24 35 = 24
Clearly, 24 = 3 ×× 8
So, we multiply the denominator by 8.

∴ 35 = 3×85×8= 244035 = 3×85×8= 2440
Hence, the required fraction is 24402440.

Page No 89:

ANSWER:

(i) Let 59 = 54 59 = 54
Clearly, 54 = 9 ×× 6
So, we multiply the numerator by 6.
∴ 59 = 5×69×6= 305459 = 5×69×6= 3054
Hence, the required fraction is 30543054.

(ii) Let 59 = 35 59 = 35

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Clearly, 35 = 5 ×× 7
So, we multiply the denominator by 7.
∴ $\frac{5}{9} = \frac{5\times7}{9\times7} = \frac{35}{63}$ 59 = 5×79×7= 3563
Hence, the required fraction is $\frac{35}{63}$3563.

Page No 89:

ANSWER:

(i) Let $\frac{6}{11} = \frac{7}{7}$ 611 = 77
Clearly, 77 = 11 ×× 7
So, we multiply the numerator by 7.

∴ $\frac{6}{11} = \frac{6\times7}{11\times7} = \frac{42}{77}$611 = 6×711×7= 4277
Hence, the required fraction is $\frac{42}{77}$4277.
(ii) Let $\frac{6}{11} = \frac{6}{0}$ 611 = 60
Clearly, 60 = 6 ×× 10
So, we multiply the denominator by 10.

∴ $\frac{6}{11} = \frac{6\times10}{11\times10} = \frac{60}{110}$611 = 6×1011×10= 60110
Hence, the required fraction is $\frac{60}{110}$60110.

Page No 89:

ANSWER:

Let $\frac{24}{30} = \frac{4}{}$ 2430 = 4
Clearly, 4 = 24 ÷÷ 6
So, we divide the denominator by 6.
∴ $\frac{24}{30} = \frac{24\div6}{30\div6} = \frac{4}{5}$2430 = 24÷630÷6= 45
Hence, the required fraction is $\frac{4}{5}$45.

Page No 89:

ANSWER:

(i) Let $\frac{36}{48} = \frac{9}{}$ 3648 = 9
Clearly, 9 = 36 ÷÷ 4
So, we divide the denominator by 4.
∴ $\frac{36}{48} = \frac{36\div4}{48\div4} = \frac{9}{12}$3648 = 36÷448÷4= 912
Hence, the required fraction is $\frac{9}{12}$912.
(ii) Let $\frac{36}{48} = \frac{4}{}$ 3648 = 4

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Clearly, 4 = 48 ÷÷ 12

So, we divide the numerator by 12.

∴ 3648 = 36÷1248÷12= 343648 = 36÷1248÷12= 34

Hence, the required fraction is 3434.

Page No 89:

ANSWER:

(i) Let 5670 = 4 5670 = 4

Clearly, 4 = 56 ÷÷ 14

So, we divide the denominator by 14.

∴ 5670 = 56÷1470÷14= 455670 = 56÷1470÷14= 45

Hence, the required fraction is 4545.

(ii) Let 5670 = 10 5670 = 10

Clearly, 10 = 70 ÷÷ 7

So, we divide the numerator by 7.

∴ 5670 = 56×770×7= 8105670 = 56×770×7= 810

Hence, the required fraction is 810810.

Page No 89:

ANSWER:

(i) Here, numerator = 9 and denominator = 15

Factors of 9 are 1, 3 and 9.

Factors of 15 are 1, 3, 5 and 15.

Common factors of 9 and 15 are 1 and 3.

H.C.F. of 9 and 15 is 3.

∴ 915 =9÷315÷3 = 35915 =9÷315÷3 = 35

Hence, the simplest form of 915 is 35915 is 35.

(ii) Here, numerator = 48 and denominator = 60

Factors of 48 are 1, 2, 3, 4, 6, 8, 12, 16, 24 and 48.

Factors of 60 are 1, 2, 3, 4, 5, 6, 10, 12, 15, 20, 30 and 60.

Common factors of 48 and 60 are 1, 2, 3, 4, 6 and 12.

H.C.F. of 48 and 60 is 12.

∴ 4860 =48÷1260÷12 = 454860 =48÷1260÷12 = 45

Hence, the simplest form of 4860 is 454860 is 45.

(iii) Here, numerator = 84 and denominator = 98

Factors of 84 are 1, 2, 3, 4, 6, 7, 12, 14, 21, 42 and 84.

Factors of 98 are 1, 2, 7, 14, 49 and 98.

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Common factors of 84 and 98 are 1, 2, 7 and 14.
H.C.F. of 84 and 98 is 14.
$\therefore \frac{84}{98} = \frac{84 \div 14}{98 \div 14} = \frac{6}{7}$ $\frac{84}{98} = \frac{84 \div 14}{98 \div 14} = \frac{6}{7}$
Hence, the simplest form of $\frac{84}{98}$ is $\frac{6}{7}$ $\frac{84}{98}$ is 67.

(iv) Here, numerator = 150 and denominator = 60
Factors of 150 are 1, 2, 3, 5, 6, 10, 15, 25, 30, 75 and 150.
Factors of 60 are 1, 2, 3, 4, 5, 6, 10, 12, 15, 20, 30 and 60.
Common factors of 150 and 60 are 1, 2, 3, 5, 6, 10, 15 and 30.
H.C.F. of 150 and 60 is 30.
$\therefore \frac{150}{60} = \frac{150 \div 30}{60 \div 30} = \frac{5}{2}$ $\frac{150}{60} = \frac{150 \div 30}{60 \div 30} = \frac{5}{2}$
Hence, the simplest form of $\frac{150}{60}$ is $\frac{5}{2}$ $\frac{150}{60}$ is 52.

(v) Here, numerator = 72 and denominator = 90
Factors of 72 are 1, 2, 3, 4, 6, 8, 9, 12, 18, 24, 36 and 72.
Factors of 90 are 1, 2, 3, 5, 6, 9, 10, 15, 18, 30, 45 and 90.
Common factors of 72 and 90 are 1, 2, 3, 6, 9 and 18.
H.C.F. of 72 and 90 is 18.
$\therefore \frac{72}{90} = \frac{72 \div 18}{90 \div 18} = \frac{4}{5}$ $\frac{72}{90} = \frac{72 \div 18}{90 \div 18} = \frac{4}{5}$
Hence, the simplest form of $\frac{72}{90}$ is $\frac{4}{5}$ $\frac{72}{90}$ is 45.

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ANSWER:

(i) Here, numerator = 8 and denominator = 11
Factors of 8 are 1, 2, 4 and 8.
Factors of 11 are 1 and 11.
Common factor of 8 and 11 is 1.
Thus, H.C.F. of 8 and 11 is 1.
Hence, $\frac{8}{11}$ $\frac{8}{11}$ is the simplest form.

(ii) Here, numerator = 9 and denominator = 14
Factors of 9 are 1, 3 and 9.
Factors of 14 are 1, 2, 7 and 14.
Common factor of 9 and 14 is 1.
Thus, H.C.F. of 9 and 14 is 1.
Hence, $\frac{9}{14}$ $\frac{9}{14}$ is the simplest form.

(iii) Here, numerator = 25 and denominator = 36
Factors of 25 are 1, 5 and 25.
Factors of 36 are 1, 2, 3, 4, 6, 9, 12, 18 and 36.

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Common factor of 25 and 36 is 1.
Thus, H.C.F. of 25 and 36 is 1.
Hence, $\frac{25}{36}$2536 is the simplest form.

(iv) Here, numerator = 8 and denominator = 15
Factors of 8 are 1, 2, 4 and 8.
Factors of 15 are 1, 3, 5 and 15.
Common factor of 8 and 15 is 1.
Thus, H.C.F. of 8 and 15 is 1.
Hence, $\frac{8}{15}$815 is the simplest form.

(v) Here, numerator = 21 and denominator = 10
Factors of 21 are 1, 3, 7 and 21.
Factors of 10 are 1, 2, 5 and 10.
Common factor of 21 and 10 is 1.
Thus, H.C.F. of 21 and 10 is 1.
Hence, $\frac{21}{10}$2110 is the simplest form.

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ANSWER:

(i) 28 $(27 = 2\times47\times4 = 828)$27 = 2×47×4 = 828
(ii) 21 $(35 = 3\times75\times7 = 2135)$35 = 3×75×7 = 2135
(iii) 32 $(58 = 5\times48\times4 = 2032)$58 = 5×48×4 = 2032
(iv) 12 $(4560 = 45\div560\div5 = 912)$4560 = 45÷560÷5 = 912
(v) 5 $(4056 = 40\div856\div8 = 57)$4056 = 40÷856÷8 = 57
(vi) 9 $(4254 = 42\div654\div6 = 79)$4254 = 42÷654÷6 = 79

Page No 93:

ANSWER:

Like fractions:
Fractions having the same denominator are called like fractions.
Examples: $\frac{3}{11}, \frac{5}{11}, \frac{7}{11}, \frac{9}{11}, \frac{10}{11}$311, 511, 711, 911, 1011

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Unlike fractions:
Fractions having different denominators are called unlike fractions.
Examples: $\frac{3}{4}$, $\frac{4}{5}$, $\frac{6}{7}$, $\frac{9}{11}$, $\frac{21}{34}$34, 45, 67, 911, 213

Page No 93:

ANSWER:

The given fractions are $\frac{3}{5}$, $\frac{7}{10}$, $\frac{8}{15}$ and $\frac{11}{30}$.35, 710, 815 and 1130.

5	5,10,15,30
2	1,2,3,6
3	1,1,3,3
	1,1,1,1

L.C.M. of 5, 10, 15 and 30 = (5 ×× 2 ×× 3) = 30
So, we convert the given fractions into equivalent fractions with 30 as the denominator.
(But, one of the fractions already has 30 as its denominator. So, there is no need to convert it into an equivalent fraction.)
Thus, we have:
$\frac{3}{5} = \frac{3\times6}{5\times6} = \frac{18}{30}$; $\frac{7}{10} = \frac{7\times3}{10\times3} = \frac{21}{30}$; $\frac{8}{15} = \frac{8\times2}{15\times2} = \frac{16}{30}$35 = 3×65×6 = 1830; 710 = 7×31
0×3 = 2130 ; 815 = 8×215×2 = 1630

Hence, the required like fractions are $\frac{18}{30}$, $\frac{21}{30}$, $\frac{16}{30}$ and $\frac{11}{30}$.1830, 2130, 1630 and 1130.

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ANSWER:

The given fractions are $\frac{1}{4}$, $\frac{5}{8}$, $\frac{7}{12}$ and $\frac{13}{24}$ .14, 58, 712 and 1324 .
L.C.M. of 4, 8, 12 and 24 = (4 ×× 2 ×× 3) = 24
So, we convert the given fractions into equivalent fractions with 24 as the denominator.
(But one of the fractions already has 24 as the denominator. So, there is no need to convert it into an equivalent fraction.)
Thus, we have:
$\frac{1}{4} = \frac{1\times6}{4\times6} = \frac{6}{24}$; $\frac{5}{8} = \frac{5\times3}{8\times3} = \frac{15}{24}$; $\frac{7}{12} = \frac{7\times2}{12\times2} = \frac{14}{24}$14 = 1×64×6 = 624; 58 = 5×38×3 =
1524 ; 712 = 7×212×2 = 1424

Hence, the required like fractions are $\frac{6}{24}$, $\frac{15}{24}$, $\frac{14}{24}$ and $\frac{13}{24}$.624, 1524, 1424 and 1324.

Page No 93:

ANSWER:

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Between two fractions with the same denominator, the one with the greater numerator is the greater of the two.

(i) >
(ii) >
(iii) <
(iv) >
(v) >
(vi) <

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ANSWER:

Between two fractions with the same numerator, the one with the smaller denominator is the greater of the two.

(i) >
(ii) >
(iii)<
(iv) >
(v) <
(vi) >

Page No 93:

ANSWER:

45, 5745, 57
By cross multiplying:
5 ×× 5 = 25 and 4 ×× 7 = 28
Clearly, 28 > 25
∴∴ 45 > 5745 > 57

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ANSWER:

38, 5638, 56
By cross multiplying:
3 ×× 6 = 18 and 5 ×× 8 = 40
Clearly, 18 < 40
∴∴ 38 < 5638 < 56

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ANSWER:

$\frac{7}{11}$, $\frac{6}{7}$7$\frac{11}{}$, 67

By cross multiplying:
7 ×× 7 = 49 and 11 ×× 6 = 66
Clearly, 49 < 66
∴∴ $\frac{7}{11}$ < $\frac{6}{7}$7$\frac{11}{}$ < 67

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ANSWER:

$\frac{7}{11}$, $\frac{6}{7}$7$\frac{11}{}$, 67
By cross multiplying:
5 ×× 11 = 55 and 9 ×× 6 = 54
Clearly, 55 > 54
∴∴ $\frac{5}{6}$ > $\frac{9}{11}$56 > 911

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ANSWER:

$\frac{7}{11}$, $\frac{6}{7}$7$\frac{11}{}$, 67
By cross multiplying:
2 ×× 9 = 18 and 4 ×× 3 = 12
Clearly, 18 > 12
∴∴ $\frac{2}{3}$ > $\frac{4}{9}$23 > 49

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ANSWER:

$\frac{6}{13}$, $\frac{3}{4}$613 , 34
By cross multiplying:
6 ×× 4 = 24 and 13 ×× 3 = 39
Clearly, 24 < 39
∴∴ $\frac{6}{13}$ < $\frac{3}{4}$613 < 34

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ANSWER:

$\frac{6}{13}, \frac{3}{4}$
By cross multiplying:
$3 \times 6 = 18$ and $4 \times 5 = 20$
Clearly, $18 < 20$
$\therefore \frac{3}{4} < \frac{6}{5}$

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ANSWER:

$\frac{5}{8}, \frac{7}{12}$
By cross multiplying:
$5 \times 12 = 60$ and $8 \times 7 = 56$
Clearly, $60 > 56$
$\therefore \frac{5}{8} > \frac{7}{12}$

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ANSWER:

L.C.M. of 9 and 6 = $(3 \times 3 \times 2) = 18$
Now, we convert $\frac{4}{9}$ and $\frac{5}{6}$ into equivalent fractions having 18 as the denominator.
$\therefore$
$\frac{4}{9} = \frac{4 \times 2}{9 \times 2} = \frac{8}{18}$ and $\frac{5}{6} = \frac{5 \times 3}{6 \times 3} = \frac{15}{18}$

Clearly, $\frac{8}{18} < \frac{15}{18}$
$\therefore \frac{4}{9} < \frac{5}{6}$

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ANSWER:

L.C.M. of 5 and 10 = $(5 \times 2) = 10$
Now, we convert $\frac{4}{5}$ into an equivalent fraction having 10 as the denominator as the other fraction has already 10 as its denominator.
$\therefore \frac{4}{5} = \frac{4 \times 2}{5 \times 2} = \frac{8}{10}$

Clearly, $\frac{8}{10} > \frac{7}{10}$
$\therefore \frac{4}{5} > \frac{7}{10}$

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ANSWER:

L.C.M. of 8 and 10 = (2 ×× 5 ×× 2 ×× 2) = 40
Now, we convert 78 and $910$78 and 910 into equivalent fractions having 40 as the denominator.
∴
$78 = 7\times58\times5 = 3540$ and $910 = 9\times410\times4 = 3640$ 78 = 7×58×5 = 3540 and 910 = 9×410×4 = 3640 4949

Clearly, $3540 < 3640$3540 < 3640
∴∴ $78 < 910$78 < 910

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ANSWER:

L.C.M. of 12 and 15 = (2 ×× 2 ×× 3 ×× 5) = 60
Now, we convert 1112 and $1315$1112 and 1315 into equivalent fractions having 60 as the denominator.
∴
$1112 = 11\times512\times5 = 5560$ and $1315 = 13\times415\times4 = 5260$ 1112 = 11×512×5 = 5560 and 1315 = 13×415×4 = 5260 4949

Clearly, $5560 > 5260$5560 > 5260
∴∴ $1112 > 1315$1112 > 1315

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ANSWER:

2	2,4,6,8
2	1,2,3,4
2	1,1,3,2
3	1,1,3,1
	1,1,1,1

The given fractions are $12, 34, 56$ and $78$12, 34, 56 and 78.
L.C.M. of 2, 4, 6 and 8 = (2 ×× 2 ×× 2 ×× 3) = 24

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We convert each of the given fractions into an equivalent fraction with denominator 24.
Now, we have:
$12 = \frac{1\times12}{2\times12} = \frac{12}{24}$; $\frac{3}{4} = \frac{3\times6}{4\times6} = \frac{18}{24} = \frac{5\times4}{6\times4} = \frac{20}{24}$; $\frac{7}{8} = \frac{7\times3}{8\times3} = \frac{21}{24}$12 = 1×122×12 = 1224; 34 = 3×64×6 = 182456 = 5×46×4 = 2024; 78 = 7×38×3 = 2124

Clearly, $\frac{12}{24} < \frac{18}{24} < \frac{20}{24} < \frac{21}{24}$1224 <1824 <2024 <2124

$\therefore \frac{1}{2} < \frac{3}{4} < \frac{5}{6} < \frac{7}{8}$12 <34 <56 <78
Hence, the given fractions can be arranged in the ascending order as follows:
$\frac{1}{2}, \frac{3}{4}, \frac{5}{6}, \frac{7}{8}$12, 34, 56, 78

Page No 93:

ANSWER:

The given fractions are $\frac{2}{3}, \frac{5}{6}, \frac{7}{9}$ and $\frac{11}{18}$.23, 56, 79 and 1118.

3	3,6,9,18
3	1,2,3,6
2	1,2,1,2
	1,1,1,1

L.C.M. of 3, 6, 9 and 18 = (3 ×× 2 ×× 3) = 18
So, we convert each of the fractions whose denominator is not equal to 18 into an equivalent fraction with denominator 18.
Now, we have:
$\frac{2}{3} = \frac{2\times6}{3\times6} = \frac{12}{18}$; $\frac{5}{6} = \frac{5\times3}{6\times3} = \frac{15}{18}$; $\frac{7}{9} = \frac{7\times2}{9\times2} = \frac{14}{18}$23 = 2×63×6 = 1218; 56 = 5×36×3 = 1518; 79 = 7×29×2 = 1418
Clearly, $\frac{11}{18} < \frac{12}{18} < \frac{14}{18} < \frac{15}{18}$1118 <1218 <1418 <1518
$\therefore \frac{11}{18} < \frac{2}{3} < \frac{7}{9} < \frac{5}{6}$1118 <23 <79 <56

Hence, the given fractions can be arranged in the ascending order as follows:
$\frac{11}{18}, \frac{2}{3}, \frac{7}{9}, \frac{5}{6}$1118 ,23 ,79 ,56

Page No 93:

ANSWER:

The given fractions are $\frac{2}{5}, \frac{7}{10}, \frac{11}{15}$ and $\frac{17}{30}$.25,710, 1115 and 1730.
L.C.M. of 5, 10, 15 and 30 = (2 ×× 5 ×× 3) = 30

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5	5,10,15,30
2	1,2,3,6
3	1,1,3,3
	1,1,1,1

So, we convert each of the fractions whose denominator is not equal to 30 into an equivalent fraction with denominator 30.
Now, we have:
$25 = \frac{2\times65\times6}{1230}$; $710 = \frac{7\times310\times3}{2130}$; $1115 = \frac{11\times215\times2}{2230}$25 = 2×65×6 = 1230; 710 = 7×310×3 = 2130; 1115 = 11×215×2 = 2230
Clearly, $1230 < 1730 < 2130 < 2230$1230 <1730 <2130 <2230
$\therefore 25 < 1730 < 710 < 1115$25 <1730 <710 <1115

Hence, the given fractions can be arranged in the ascending order as follows:
$25, 1730, 710, 1115$25, 1730, 710, 1115

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ANSWER:

The given fractions are $34, 78, 1116$ and 2332.34, 78, 1116 and 2332.
L.C.M. of 4, 8, 16 and 32 = (2 × 2 × 2 × 2 × 2) = 32

2	4,8,16,32
2	2,4,8,16
2	1,2,4,8
2	1,1,2,4
2	1,1,1,2
	1,1,1,1

So, we convert each of the fractions whose denominator is not equal to 32 into an equivalent fraction with denominator 32.
Now, we have:
$34 = \frac{3\times84\times8}{2432}$; $78 = \frac{7\times48\times4}{2832}$; $1116 = \frac{11\times216\times2}{2232}$34 = 3×84×8 = 2432; 78 = 7×48×4 = 2832; 1116 = 11×216×2 = 2232
Clearly, $2232 < 2332 < 2432 < 2832$2232 <2332 <2432 <2832
$\therefore 1116 < 2332 < 34 < 78$1116 <2332 <34 <78

Hence, the given fractions can be arranged in the ascending order as follows:
$1116, 2332, 34, 78$1116, 2332, 34, 78

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ANSWER:

The given fractions are $\frac{3}{4}$, $\frac{5}{8}$, $\frac{11}{12}$ and $\frac{17}{24}$.34, 58, 1112 and 1724.
L.C.M. of 4, 8, 12 and 24 = (2 × 2 × 2 × 3) = 24

2	4,8,12,24
2	2,4,6,12
3	1,2,3,6
2	1,2,1,2
	1,1,1,1

So, we convert each of the fractions whose denominator is not equal to 24 into an equivalent fraction with denominator 24.
Thus, we have;
$\frac{3}{4} = \frac{3\times6}{4\times6} = \frac{18}{24}$; $\frac{5}{8} = \frac{5\times3}{8\times3} = \frac{15}{24}$; $\frac{11}{12} = \frac{11\times2}{12\times2} = \frac{22}{24}$34 = 3×64×6 = 1824; 58 = 5×38× 3 = 1524; 1112 = 11×212×2 = 2224
Clearly, $\frac{22}{24} > \frac{18}{24} > \frac{17}{24} > \frac{15}{24}$2224 >1824 >1724 >1524

$\therefore \frac{11}{12} > \frac{3}{4} > \frac{17}{24} > \frac{5}{8}$1112 >34 >1724 >58

Hence, the given fractions can be arranged in the descending order as follows:
$\frac{11}{12}, \frac{3}{4}, \frac{17}{24}, \frac{5}{8}$1112, 34, 1724, 58

Page No 93:

ANSWER:

The given fractions are $\frac{7}{9}$, $\frac{5}{12}$, $\frac{11}{18}$ and $\frac{17}{36}$.79, 512, 1118 and 1736.
L.C.M. of 9, 12, 18 and 36 = (3 × 3 × 2 × 2) = 36

3	9,12,18,36
3	3,4,6,12
2	1,4,2,4
2	1,2,1,2
	1,1,1,1

We convert each of the fractions whose denominator is not equal to 36 into an equivalent fraction with denominator 36.
Thus, we have:
$\frac{7}{9} = \frac{7\times4}{9\times4} = \frac{28}{36}$; $\frac{5}{12} = \frac{5\times3}{12\times3} = \frac{15}{36}$; $\frac{11}{18} = \frac{11\times2}{18\times2} = \frac{22}{36}$79 = 7×49×4 = 2836; 512 = 5×3 12×3 = 1536; 1118 = 11×218×2 = 2236
Clearly, $\frac{28}{36} > \frac{22}{36} > \frac{17}{36} > \frac{15}{36}$2836 >2236 >1736 >1536

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$\therefore 79 > 1118 > 1736 > 512$79 >1118 >1736 >512

Hence, the given fractions can be arranged in the descending order as follows:
$79, 1118, 1736, 512$79 ,1118,1736,512

Page No 93:

ANSWER:

The given fractions are 23, 35, 710 and 815.23, 35, 710 and 815.
L.C.M. of 3, 5,10 and 15 = (2 × 3 × 5) = 30

3	3,5,10,15
5	1,5,10,5
2	1,1,2,1
	1,1,1,1

So, we convert each of the fractions into an equivalent fraction with denominator 30.
Thus, we have:
$23 = 2 \times 103 \times 10 = 2030$; $35 = 3 \times 65 \times 6 = 1830$; $710 = 7 \times 310 \times 3 = 2130$; $815 = 8 \times 215 \times 2 = 1630$23 = 2×103× 10 = 2030; 35 = 3×65×6 = 1830; 710 = 7×310×3 = 2130; 815 = 8×215×2 = 1630
Clearly, $2130 > 2030 > 1830 > 1630$2130 >2030 >1830 >1630
$\therefore 710 > 23 > 35 > 815$710 >23 >35 >815

Hence, the given fractions can be arranged in the descending order as follows:
$710, 23, 35, 815$710 ,23 ,35 ,815

Page No 93:

ANSWER:

The given fractions are 57, 914, 1721 and 3142.57, 914, 1721 and 3142.
L.C.M. of 7, 14, 21 and 42 = (2 × 3 × 7) = 42

7	7,14,21,42
2	1,2,3,6
3	1,1,3,3
	1,1,1,1

We convert each one of the fractions whose denominator is not equal to 42 into an equivalent fraction with denominator 42.
Thus, we have:

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$57 = 5\times67\times6 = 3042$; $914 = 9\times314\times3 = 2742$; $1721 = 17\times221\times2 = 3442$57 = 5×67×6 = 3042; 914 = 9×314×3 = 2742; 1721 = 17×221×2 = 3442
Clearly, $3442 > 3142 > 3042 > 2742$3442 >3142 >3042 >2742
$\therefore 1721 > 3142 > 57 > 914$1721 >3142 >57 >914
Hence, the given fractions can be arranged in the descending order as follows:
$1721, 3142, 57, 914$1721,3142,57, 914

Page No 93:

ANSWER:

The given fractions are $112, 123, 17, 19, 117$ and 150.112,123, 17, 19 , 117 and 150.
As the fractions have the same numerator, we can follow the rule for the comparison of such fractions.
This rule states that when two fractions have the same numerator, the fraction having the smaller denominator is the greater one.
Clearly, $17 > 19 > 112 > 117 > 123 > 150$17 >19 >112 >117>123>150
Hence, the given fractions can be arranged in the descending order as follows:
$17, 19, 112, 117, 123, 150$17, 19, 112, 117, 123, 150

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ANSWER:

The given fractions are $37, 311, 35, 313, 34$ and 317.37, 311, 35, 313, 34 and 317.
As the fractions have the same numerator, so we can follow the rule for the comparison of such fractions.
This rule states that when two fractions have the same numerator, the fraction having the smaller denominator is the greater one.

Clearly, $34 > 35 > 37 > 311 > 313 > 317$34 >35 >37 >311>313>317
Hence, the given fractions can be arranged in the descending order as follows:
$34, 35, 37, 311, 313, 317$34, 35, 37, 311, 313, 317

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ANSWER:

Lalita read 30 pages of a book having 100 pages.
Sarita read $25$25 of the same book.
$25$25 of 100 pages = $25 \times 100 = 2005 = 40$ pages25 × 100 = 2005 = 40 pages
Hence, Sarita read more pages than Lalita as 40 is greater than 30.

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Page No 94:

ANSWER:

To know who exercised for a longer time, we have to compare 23 hour with 34 hour 23 hour with 34 hour .
On cross multiplying:
$4 \times\times 2 = 8$ and $3 \times\times 3 = 9$
Clearly, $8 < 9$
$\therefore\therefore$ 23 hour $<$ 34 hour23 hour < 34 hour
Hence, Rohit exercised for a longer time.

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ANSWER:

Fraction of students who passed in VI A = $2025 = 20 \div 525 \div 5 = 45$2025 = 20÷525÷5 = 45

Fraction of students who passed in VI B = $2430 = 24 \div 630 \div 6 = 45$2430 = 24÷630÷6 = 45
In both the sections, the fraction of students who passed is the same, so both the sections have the same result.

Page No 96:

ANSWER:

The given fractions are like fractions.
We know:
Sum of like
fractions = Sum of the numeratorsCommon denominatorSum of the numeratorsCommon denominator
Thus, we have:
$58 + 18 = (5+1)\ 8 = 6\ 384 = 34$58 + 18 = 5+1 8 = 6 384 = 34

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ANSWER:

The given fractions are like fractions.
We know:
Sum of like
fractions = Sum of the numeratosCommon denominatorSum of the numeratosCommon denominator

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Thus, we have:
$49 + 89 = (4+8)\ 9 = 12493 = 43 = 1134$49 + 89 = 4+8 9 = 12493 = 43 = 113

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ANSWER:

The given fractions are like fractions.
We know:
Sum of like
fractions = Sum of the numeratorsCommon denominatorSum of the numeratorsCommon denominator
Thus, we have:
$135 + 245 = 85 + 145 = (8+14)\ 5 = 225 = 425$135 + 245 = 85 + 145 = 8+14 5 = 225 = 425

Page No 96:

ANSWER:

L.C.M. of 9 and 6 = (2 ×× 3 ×× 3) = 18

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

Now, we have:

$29 = 2 \times 29 \times 2 = 418;\ 56 = 5 \times 36 \times 3 = 1518 \therefore 29 + 56 = 418 + 1518 = (4 + 15)18 = 1918 = 1118$

29 = 2 × 29 × 2 = 418; 56 = 5 × 36 × 3 = 1518∴ 29 + 56 = 418 + 1518 = 4 + 1518 = 1918 = 1118

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ANSWER:

L.C.M. of 12 and 16 = (2 ×× 2 ×× 2 ×× 2 ×× 3) = 48

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

Now, we have:

$712 = 7 \times 412 \times 4 = 2848; 916 = 9 \times 316 \times 3 = 2748 \therefore 712 + 916 = 2848 + 2748 = (28 + 27)48 = 5548 = 1748$

712 = 7 × 412 × 4 = 2848; 916 = 9 × 316 × 3 = 2748∴ 712 + 916 = 2848 + 2748 = 28 + 2748 = 5548 = 1748

Page No 96:

ANSWER:

L.C.M. of 15 and 20 = (3 ×× 5 ×× 2 ×× 2) = 60

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

$\therefore 415 + 1720 = (16 + 51)60 \quad \{[60 \div 15 = 4, 4 \times 4 = 16] \text{ and } [60 \div 20 = 3, 17 \times 3 = 51]\}$
$= 6760 = 1760$

∴ 415 + 1720 = 16 + 5160 6 0 ÷ 15 = 4, 4 × 4 = 16 and 60 ÷ 20 = 3, 17 × 3 = 51 = 6760 = 1760

Page No 96:

ANSWER:

We have:

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2	4,6
2	2,3
3	1,3
	1,1

$2\frac{3}{4} + 5\frac{5}{6} = \frac{11}{4} + \frac{35}{6}$ L.C.M. of 4 and 6 = (2 × 2 × 3) = 12 $= \frac{(66 + 140)}{24}$ {[24 ÷ 4 = 6, 6 × 11 = 66] and [24 ÷ 6 = 4, 4 × 35 = 140]} $= \frac{206}{103}\frac{24}{12} = \frac{103}{12} = 8\frac{7}{12}$ 234 + 556 = 114 + 356 L.C.M. of 4 and 6 = (2 × 2 × 3) = 12 = 66 + 14024 24 ÷ 4 = 6, 6 × 11 = 66 and 24 ÷ 6 = 4, 4 × 35 = 140 = 2061032412 = 10312 = 8712

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

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ANSWER:

We have:

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

$3\frac{1}{8} + 1\frac{5}{12} = \frac{25}{8} + \frac{17}{12}$ L.C.M. of 8 and 12 = (2 × 2 × 2 × 3) = 24 $= \frac{(75 + 34)}{24}$ {[24 ÷ 8 = 3, 3 × 25 = 75] and [24 ÷ 12 = 2, 2 × 17 = 34]} $= \frac{109}{24}$ $= 4\frac{13}{24}$ 318 + 1512 = 258 + 1712 L.C.M. of 8 and 12 = (2 × 2 × 2 × 3) = 24 = 75 + 3424 24 ÷ 8 = 3, 3 × 25 = 75 and 24 ÷ 12 = 2, 2 × 17 = 34 = 10924 = 41324

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

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ANSWER:

We have:

5	10,15
2	2,3
3	1,3
	1,1

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$2\frac{7}{10} + 3\frac{8}{15} = \frac{27}{10} + \frac{53}{15}$ L.C.M. of 10 and 15 = (2 × 3 × 5) = 30 $= \frac{(81 + 106)}{30}$ {[30 ÷10 = 3, 3 × 27 = 81] and [30 ÷ 15 = 2, 2 × 53 = 106]} $= \frac{187}{30} = 6\frac{7}{30}$ 2710 + 3815 = 2710 + 5315 L.C.M. of 10 and 15 = (2 × 3 × 5) = 30 = 81 + 10630 30 ÷10 = 3, 3 × 27 = 81 and 30 ÷ 15 = 2, 2 × 53 = 106 = 18730 = 6730

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

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ANSWER:

We have:

3	3,6
2	1,2
	1,1

$3\frac{2}{3} + 1\frac{5}{6} + 2 = \frac{11}{3} + \frac{11}{6} + \frac{2}{1}$ L.C.M. of 3 and 6 = (2 × 3) = 6 $= \frac{(22 + 11 + 12)}{6}$ {[6 ÷ 3 = 2, 2 × 11 = 22], [6 ÷ 6 =1, 1 × 11 = 11] and [6 ÷ 1 = 6, 6 × 2 = 12]} $= \frac{45}{6}\frac{15}{6}\frac{2}{} = \frac{15}{2} = 7\frac{1}{2}$ 323 + 156 + 2 = 113 + 116 + 21 L.C.M. of 3 and 6 = (2 × 3) = 6 = 22 + 11 + 126 6 ÷ 3 = 2, 2 × 11 = 22, 6 ÷ 6 =1, 1 × 11 = 11 and 6 ÷ 1 = 6, 6 × 2 = 12 = 451562 = 152 = 712

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

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We have:

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

$3 + 1\frac{4}{15} + 1\frac{3}{20} = \frac{31}{1} + \frac{19}{15} + \frac{23}{20}$ L.C.M. of 15 and 20 = (2 × 2 × 3 × 5) = 60 $= \frac{(180 + 76 + 69)}{60}$ {[60 ÷ 1 = 60, 60 × 3 = 180], [60 ÷ 15 = 4, 4 × 19 = 76] and [60 ÷ 20 =3, 3 × 23 = 69]} $= \frac{325}{65}\frac{60}{12} = \frac{65}{12} = 5\frac{5}{12}$ 3 + 141

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5 + 1320 = 31 + 1915 + 2320 L.C.M. of 15 and 20 = (2 × 2 × 3 × 5) = 60
= 180 + 76 + 6960 60 ÷ 1 = 60, 60 × 3 = 180, 60 ÷ 15 = 4, 4 × 19 = 76
and 60 ÷ 20 =3, 3 × 23 = 69 = 325656012 = 6512 = 5512
$2_{34}+5_{56}$

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We have:

3	3,4,6
2	1,4,2
2	1,2,1
	1,1,1

$3_{13} + 4_{14} + 6_{16} = 103 + 174 + 376$ L.C.M. of 3, 4 and 6 = (2 × 2 × 3)
$= 12 = (40 + 51 + 74)12$ {[12 ÷ 3 = 4, 4 × 10 = 40], [12 ÷ 4 = 3, 3 ×
17 = 51] and [12 ÷ 6 =2, 2 × 37 = 74]} $= 16_{55}5_{124} = 554 = 13_{34}$ 313 + 414 + 616 = 1
03 + 174 + 376 L.C.M. of 3, 4 and 6 = (2 × 2 × 3) = 12 = 40 + 51 + 7412
12 ÷ 3 = 4, 4 × 10 = 40, 12 ÷ 4 = 3, 3 × 17 = 51 and 12 ÷ 6 =2, 2 × 37 =
74 = 16555124 = 554 = 1334
$2_{34}+5_{56}$

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We have:

3	3,6,9,18
2	1,2,3,6
3	1,1,3,3
	1,1,1,1

$2_3 + 3_{16} + 4_{29} + 2_{518} = 23 + 196 + 389 + 4118$ L.C.M. of 3, 6 and 9 =
$(2 \times 3 \times 3) = 18 = (12 + 57 + 76 + 41)18$ {[18 ÷ 3 = 6, 6 × 2 = 12], [18
÷ 6 = 3, 3 × 19 = 57], [18 ÷ 9 =2, 2 × 38 = 76] and [18 ÷ 18 = 1, 1 × 41= 41]} $= 18_{63}$
$1_{183} = 313 = 10_{13}$ 23 + 316 + 429 + 2518 = 23 + 196 + 389 + 4118 L.C.
M. of 3, 6 and 9 = (2 × 3 × 3) = 18 = 12 + 57 + 76 + 4118 18 ÷ 3 = 6, 6

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× 2 = 12, 18 ÷ 6 = 3, 3 × 19 = 57, 18 ÷ 9 =2, 2 × 38 = 76 and 18 ÷ 18 = 1, 1 × 41= 41 = 1 8631183 = 313 = 1013

$2_{34}+5_{56}$

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We have:

$2_{13} + 1_{14} + 2_{56} + 3_{712} = 73 + 54 + 176 + 4312$ L.C.M. of 3, 4, 6 and 12 = (2 × 2 × 3) = 12 $= (28 + 15 + 34 + 43)_{12}$ {[12 ÷ 3 = 4, 4 × 7 = 28], [12 ÷ 4 = 3, 3 × 5 = 15], [12 ÷ 6 =2, 2 × 17 = 34] and [12 ÷ 12 = 1, 1 × 43 = 43] } = $120_{10}12_1$ = 10 213 + 114 + 256 + 3712 = 73 + 54 + 176 + 4312 L.C.M. of 3, 4, 6 and 12 = (2 × 2 × 3) = 12 = 28 + 15 + 34 + 4312 12 ÷ 3 = 4, 4 × 7 = 28, 12 ÷ 4 = 3, 3 × 5 = 15, 12 ÷ 6 =2, 2 × 17 = 34 and 12 ÷ 12 = 1, 1 × 43 = 43 = 12010121 = 10

$2_{34}+5_{56}$

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We have:

$2 + 34 + 1_{58} + 3_{716} = 21 + 34 + 138 + 5516$ L.C.M. of 4, 8, and 16 = (2 × 2 × 2 × 2) = 16 $= (32 + 12 + 26 + 55)_{16}$ {[16 ÷ 1 = 16, 16 × 2 = 32], [16 ÷ 4 = 4, 4 × 3 = 12], [16 ÷ 8 =2, 2 × 13 = 26] and [16 ÷ 16 = 1, 1 × 55= 55]} = 125_{16} = 713_{16} 2 + 34 + 158 + 3716 = 21 + 34 + 138 + 5516 L.C.M. of 4, 8, and 16 = (2 × 2 × 2 × 2) = 16 = 32 + 12 + 26 + 5516 16 ÷ 1 = 16, 16 × 2 = 32, 16 ÷ 4 = 4, 4 × 3 = 12, 16 ÷ 8 =2, 2 × 13 = 26 and 16 ÷ 16 = 1, 1 × 55= 55 = 12516 = 71316

$2_{34}+5_{56}$

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Total cost of both articles = Cost of pencil + Cost of eraser
Thus, we have:

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$\text{Rs } 3\frac{2}{5} + \text{Rs } 2\frac{7}{10} = 175 + 2710 = (34 + 27)10$ (L.C.M. of 5 and 10 $= (5 \times 2) = 10$) $= 61\frac{1}{0} = \text{Rs } 6\frac{1}{10}$ Rs 325 + Rs 2710 = 175 + 2710 = 34 + 2710 (L.C.M. of 5 and 10 = (5 × 2) = 10) = 6110 = Rs 6110

Hence, the total cost of both the articles is $\text{Rs } 6\frac{1}{10}$Rs 6110.

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Total cloth purchased by Sohini = Cloth for kurta + Cloth for pyjamas

Thus, we have:

$(4\frac{1}{2} + 2\frac{2}{3})\text{ m} = (92 + 83)\text{ m}$ (L.C.M. of 2 and 3 = (2 × 3) = 6)$= ((27 + 16)6)$ m $\{[6 \div 2 = 3, 3 \times 9 = 27]$ and $[6 \div 3 = 2, 2 \times 8 = 16]\} = (436)\text{ m} = 7\frac{1}{6}\text{ m}$ 412 + 223 m = 92 + 83 m (L.C.M. of 2 and 3 = (2 × 3) = 6)= 27 + 166 m 6 ÷ 2 = 3, 3 × 9 = 27 and 6 ÷ 3 = 2, 2 × 8 = 16 = 43 6 m = 716 m

∴∴ Total length of cloth purchased = $7\frac{1}{6}\text{ m}$ 716 m

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Distance from Kishan's house to school = Distance covered by him by rickshaw + Distance covered by him on foot

Thus, we have:

$(4\frac{3}{4} + 1\frac{1}{2})\text{ km} = (194 + 32)\text{ km} = ((19 + 6)4)$ km (L.C.M .of 2 and 4 = (2 ×2) = 4)$= (254)$ km $= 6\frac{1}{4}$km 434 + 112 km = 194 + 32 km = 19 + 64 km (L.C.M .of 2 and 4 = (2 ×2) = 4)= 254 km = 614km

Hence, the distance from Kishan's house to school is $6\frac{1}{4}\text{ km}$ 614 km.

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Weight of the cylinder filled with gas = Weight of the empty cylinder + Weight of the gas inside the cylinder

Thus, we have:

$(16\frac{4}{5} + 14\frac{2}{3})\text{ kg} = (845 + 443)\text{ kg}$ (L.C.M. of 5 and 3 = (3 × 5) = 15)$= ((252 + 220)15)$ kg $= (47215)\text{ kg} = 31\frac{7}{15}\text{ kg}$ 1645 + 1423 kg = 845 + 443 kg (L.C.M. of 5 and 3 = (3 × 5) = 15)= 252 + 22015 kg =

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47215 kg = 31715 kg
Hence, the weight of the cylinder filled with gas is $31\frac{7}{15}$ kg31715 kg.

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Difference of like fractions = Difference of numerator ÷÷ Common denominator
$\frac{5}{8} - \frac{1}{8} = \frac{(5-1)}{8} = \frac{4}{8} = \frac{1}{2}$58 - 18 = 5 - 18 = 4182 = 12

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Difference of like fractions = Difference of numerator ÷÷ Common denominator
$\frac{7}{12} - \frac{5}{12} = \frac{(7-5)}{12} = \frac{2}{12} = \frac{1}{6}$712 - 512 = 7 - 512 = 21126 = 16

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Difference of like fractions = Difference of numerator ÷÷ Common denominator
$4\frac{3}{7} - 2\frac{4}{7} = \frac{31}{7} - \frac{18}{7}$ $= \frac{(31-18)}{7}$ $= \frac{13}{7}$ 437 - 247 = 317 - 187
= 31 - 187 = 137

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$\frac{5}{6} - \frac{4}{9}$56 - 49

3 6, 9 2 2, 3 3 1, 3 1, 1 3 6, 9 2 2, 3 3 1, 3 1, 1
L.C.M. of 6 and 9 = (3 ×× 2 ×× 3) = 18
Now, we have:
$\frac{5}{6} = \frac{5 \times 3}{6 \times 3} = \frac{15}{18}$; $\frac{4}{9} = \frac{4 \times 2}{9 \times 2} = \frac{8}{18}$∴ $\frac{5}{6} - \frac{4}{9} = \frac{15}{18} - \frac{8}{18} = \frac{(15-8)}{18} = \frac{7}{18}$56 = 5 × 36 × 3 = 1518; 49 = 4 × 29 × 2 = 818∴ 56 - 49 = 1518 - 818 = 15 - 818 = 718

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$12 - 38$12 - 38

L.C.M. of 2 and 8 = (2 ×× 2 ×× 2) = 8
Now, we have:
$12 = 1 \times 42 \times 4 = 48 \therefore 12 - 38 = 48 - 38 = (4 - 3)8 = 18$12 = 1 × 42 × 4 = 48 ∴ 12 - 38 = 48 - 38 = 4 - 38 = 18

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$58 - 712$58 - 712

2 8, 12 2 4, 6 2 2, 3 3 1, 3 1, 1 2 8, 12 2 4, 6 2 2, 3 3 1, 3 1, 1
L.C.M. of 8 and 12 = (2 ×× 2×× 2××3) = 24
Now, we have:
$58 = 5 \times 38 \times 3 = 1524; 712 = 7 \times 212 \times 2 = 1424 \therefore 58 - 712 = 1524 - 1424 = (15 - 14)24 = 124$58 = 5 × 38 × 3 = 1524; 712 = 7 × 212 × 2 = 1424∴ 58 - 712 = 1524 - 1424 = 15 - 1424 = 124

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$279 - 1815 = 259 - 2315$ 3 9, 15 3 3, 5 51, 5 1, 1L.C.M. of 9 and 15 =(3 × 3 × 5) = 45 $\therefore 259 - 2315 = (125 - 69)45 = 56\,45 = 11145$ {[45 ÷ 9 = 5, 5 × 25 = 125] and [45 ÷ 15 = 3, 3 × 23 = 69]}279 - 1815 = 259 - 2315 3 9, 15 3 3, 5 51, 5 1, 1L.C.M. of 9 and 15 =(3 × 3 × 5) = 45 ∴ 259 - 2315 = 125 - 6945 = 56 45 = 11145
45 ÷ 9 = 5, 5 × 25 = 125 and 45 ÷ 15 = 3, 3 × 23 = 69

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$358 - 2512 = 298 - 2912$ 2 8, 12 2 4, 6 2 2, 3 3 1, 3 1, 1 L.C.M. of 8 and 12 =(2 × 2 × 2 × 3) = 24 $\therefore 298 - 2912 = (87 - 58)24 = 29\,24 = 1524$
{[24 ÷ 8 = 3, 3 × 29 = 87] and [24 ÷ 12 = 2, 2 × 29 = 58]}358 - 2512 = 298 - 2912 2 8, 12 2 4, 6 2 2, 3 3 1, 3 1, 1 L.C.M. of 8 and 12 =(2 × 2 × 2 × 3) = 24 ∴ 298 - 2912 = 87 - 5824 = 29 24 = 1524
24 ÷ 8 = 3, 3 × 29 = 87 and 24 ÷ 12 = 2, 2 × 29 = 58

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$2\frac{3}{10} - 1\frac{7}{15} = \frac{23}{10} - \frac{22}{15}$ 5 10, 15 2 2, 3 3 1, 3 1, 1 L.C.M. of 10 and 15 = (2 × 3 × 5) = 30= $\frac{(69-44)}{30}$ {[30 ÷ 10 = 3, 3 × 23 = 69] and [30 ÷ 15 = 2, 2 × 22 = 44]} = $\frac{25}{30}$6 = $\frac{5}{6}$2310 - 1715 = 2310 - 2215 5 10, 15 2 2, 3 3 1, 3 1, 1 L.C.M. of 10 and 15 = (2 × 3 × 5) = 30= 69 - 4430 30 ÷ 10 = 3, 3 × 23 = 69 and 30 ÷ 15 = 2, 2 × 22 = 44 = 255306 = 56

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$6\frac{2}{3} - 3\frac{3}{4} = \frac{20}{3} - \frac{15}{4}$ L.C.M. of 3 and 4 = (2 × 2 × 3) = 12 = $\frac{(80-45)}{12}$ {[12 ÷ 3 = 4, 4 × 20 = 80] and [12 ÷ 4 = 3, 3 × 15 = 45]}= $\frac{35}{12}$ = $2\frac{11}{12}$623 - 334 = 203 - 154 L.C.M. of 3 and 4 = (2 × 2 × 3) = 12 = 80 - 4512 12 ÷ 3 = 4, 4 × 20 = 80 and 12 ÷ 4 = 3, 3 × 15 = 45= 3512 = 21112

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$7 - 5\frac{2}{3} = \frac{7}{1} - \frac{17}{3}$ L.C.M. of 1 and 3 = 3 = $\frac{(21-17)}{3}$ {[3 ÷ 1 = 3, 3 × 7 = 21] and [3 ÷ 3 = 1, 1 × 17 = 17]}= $\frac{4}{3}$ = $1\frac{1}{3}$7 - 52 3 = 71 - 173 L.C.M. of 1 and 3 = 3 = 21 - 173 3 ÷ 1 = 3, 3 × 7 = 21 and 3 ÷ 3 = 1, 1 × 17 = 17= 43 = 113

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$10 - 6\frac{3}{8} = \frac{101}{10} - \frac{51}{8}$ L.C.M. of 1 and 8 = 8 = $\frac{(80-51)}{8}$ {[8 ÷ 1 = 8, 8 × 10 = 80] and [8 ÷ 8 = 1, 1 × 51 = 51]}= $\frac{29}{8}$ = $3\frac{5}{8}$1 0 - 638 = 101 - 518 L.C.M. of 1 and 8 = 8 = 80 - 518 8 ÷ 1 = 8, 8 × 10 = 80 and 8 ÷ 8 = 1, 1 × 51 = 51= 298 = 358

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We have:

$\frac{5}{6} - \frac{4}{9} + \frac{2}{3}$ L.C.M. of 3, 6 and 9 =(2 × 3 × 3) = 18 = $\frac{(15-8+12)}{18}$ {[18 ÷ 6 = 3, 3 × 5 = 15], [18 ÷ 9 = 2, 2 × 4 = 8] and [18 ÷ 3 = 6, 6 × 2 = 12]} = $\frac{(27-8)}{18}$ =$\frac{19}{18}$ = $1\frac{1}{18}$ 56 - 49 + 23 L.C.M. of 3, 6 and 9

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=2 × 3 × 3 = 18 = 15 - 8 + 1218 18 ÷ 6 = 3, 3 × 5 = 15, 18 ÷ 9 = 2, 2 × 4 = 8 and 18 ÷ 3 = 6, 6 × 2 = 12 = 27 - 818 =1918 = 1118
3 3, 6, 93 1, 2, 32 1, 2, 1 1, 1, 13 3, 6, 93 1, 2, 32 1, 2, 1 1, 1, 1

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We have:
$58 + 34 - 712$ 2 4, 8, 12 2 2, 4, 6 2 1, 2, 3 3 1, 1, 3 1,1, 1
L.C.M. of 4, 8 and 12 = (2 × 2 × 2 × 3) = 24= $(15 + 18 - 14)24$ {[24 ÷ 8 = 3, 3 × 5 = 15], [24 ÷ 4 = 6, 6 × 3 = 18] and [24 ÷ 12 =2, 2 × 7 = 14]} = $(33 - 14)24 = 1924$ 58 + 34 - 712 2 4, 8, 12 2 2, 4, 6 2 1, 2, 3 3 1, 1, 3 1,1, 1
L.C.M. of 4, 8 and 12 = (2 × 2 × 2 × 3) = 24= 15 + 18 - 1424 24 ÷ 8 = 3, 3 × 5 = 15, 24 ÷ 4 = 6, 6 × 3 = 18 and 24 ÷ 12 =2, 2 × 7 = 14 = 33 - 1424 = 1924
$2_{34}+5_{56}$

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We have:
$21 + 1115 - 59$ 3 1, 15, 9 3 1, 5, 3 5 1, 5, 1 1, 1, 1 L.C.M. of 15 and 9 = (3 × 3 × 5) = 45 = $(90 + 33 - 25)45$ {[45 ÷ 1 = 45, 45 × 2 = 90], [45 ÷ 15 = 3, 3 × 11 = 33] and [45 ÷ 9 =5, 5 × 5 = 25]} = $(90 + 8)45 = 9845 = 2_{845}$ 21 + 1115 - 59 3 1, 15, 9 3 1, 5, 3 5 1, 5, 1 1, 1, 1
L.C.M. of 15 and 9 = (3 × 3 × 5) = 45 = 90 + 33 - 2545 45 ÷ 1 = 45, 45 × 2 = 90, 45 ÷ 15 = 3, 3 × 11 = 33 and 45 ÷ 9 =5, 5 × 5 = 25 = 90 + 845 = 9845 = 2845
$2_{34}+5_{56}$

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We have:
$5_{34} - 4_{512} + 3\ 16 = 234 - 5312 + 196$ L.C.M. of 4, 12 and 6 = (2 × 2 × 3) = 12 2 4, 12, 6 2 2, 6, 3 3 1, 2, 3 2 1, 2, 1 1, 1, 1 = $(69 - 53 + 38)12$ {[12 ÷ 4 =3, 3 × 23 = 69], [12 ÷ 12 =1, 1 × 53 = 53] and [12 ÷

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$6 = 2, 2 \times 19 = 38]\}$ $= (107 - 53)12 = 5412$ $= 92 = 4_{12}$ 534 - 4512 + 3 16 = 234 - 5312 + 1 96 L.C.M. of 4, 12 and 6 = (2 × 2 × 3) = 12 2 4, 12, 6 2 2, 6, 3 3 1, 2, 3 2 1, 2, 1 1, 1, 1 = 69 - 53 + 3812 12 ÷ 4 =3, 3 × 23 = 69, 12 ÷ 12 =1, 1 × 53 = 53 and 12 ÷ 6 =2, 2 × 19 = 38 = 107 - 5312 = 5412 =92 = 412 $2_{34} + 5_{56}$

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We have:

$2 + 5_{710} - 3_{1415} = 21 + 5710 - 5915$ 5 1, 10, 15 2 1, 2, 3 3 1, 1, 3 1, 1, 1 L.C.M. of 10 and 15 = (2 × 5 × 3) = 30 $= (60 + 171 - 118)30$ {[30 ÷ 1 =30, 30 × 2 = 60], [30 ÷ 10 =3, 3 × 57 = 171] and [30 ÷ 15 =2, 2 × 59 = 118]} $= (231 - 118)30 = 11330 = 32330$ 2 + 5710 - 3 1415 = 21 + 5710 - 5915 5 1, 10, 15 2 1, 2, 3 3 1, 1, 3 1, 1, 1 L.C.M. of 10 and 15 = (2 × 5 × 3) = 30 = 60 + 171 - 11830 30 ÷ 1 =30, 30 × 2 = 60, 30 ÷ 10 =3, 3 × 57 = 171 and 30 ÷ 15 =2, 2 × 59 = 118 = 231 -11830 = 11330 = 32330

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We have:

$8 - 3_{12} - 2_{14} = 81 - 72 - 94$ 2 1, 2, 4 2 1, 1, 2 1, 1, 1 L.C.M. of 1, 2 and 4 = (2 × 2) = 4 $= (32 - 14 - 9)4$ {[4 ÷ 1 =4, 4 × 8 = 32], [4 ÷ 2 =2, 2 × 7 = 14] and [4 ÷ 4 =1, 1 × 9 = 9]} $= (32 - 23)4 = 94 = 2_{14}$ 8 - 312 - 214 = 81 - 72 - 94 2 1, 2, 4 2 1, 1, 2 1, 1, 1 L.C.M. of 1, 2 and 4 = (2 × 2) = 4 = 32 - 14 - 94 4 ÷ 1 =4, 4 × 8 = 32, 4 ÷ 2 =2, 2 × 7 = 14 and 4 ÷ 4 =1, 1 × 9 = 9 = 32 - 234 = 94 = 214

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We have:

$8_{56} - 3_{38} + 2_{712} = 536 - 278 + 3112$ 2 6, 8, 12 2 3, 4, 6 3 3, 2, 3 2 1, 2, 1 1, 1, 1 L.C.M. of 6, 8 and 12 = (2 × 2 × 2 × 3) = 24 $= (212 - 81 + 62)24$

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{[24 ÷ 6 =4, 4 × 53 = 212], [24 ÷ 8 =3, 3 × 27 = 81] and [24 ÷ 12 = 2, 2 × 31 = 62]} $= (274 - 81)24 = 19324 = 8124$ 856 - 338 + 2712 = 536 - 278 + 3112 2 6, 8, 12 2 3, 4, 6 3 3, 2, 3 2 1, 2, 1 1, 1, 1 L.C.M. of 6, 8 and 12 = (2 × 2 × 2 × 3) = 24 = 212 - 81 + 6224 24 ÷ 6 =4, 4 × 53 = 212, 24 ÷ 8 =3, 3 × 27 = 81 and 24 ÷ 12 =2, 2 × 31 = 62 = 274 - 8124 = 19324 = 8124

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We have:

$616 - 515 + 313 = 376 - 265 + 103$ 2 6, 5, 33 3, 5, 3 5 1, 5, 1 1, 1, 1 L.C.M. of 6, 5 and 3 = (2 × 5 × 3) = 30 $= (185 - 156 + 100)30$ {[30 ÷ 6 =5, 5 × 37 = 185], [30 ÷ 5 =6, 6 × 26 = 156], and [30 ÷ 3 =10, 10 × 10 = 100]} $= (285 - 156)30 = 12943301 0 = 4310$ 616 - 515 + 313 = 376 - 265 + 103 2 6, 5, 33 3, 5, 3 5 1, 5, 1 1, 1, 1 L.C.M. of 6, 5 and 3 = (2 × 5 × 3) = 30 = 185 - 156 + 10030 30 ÷ 6 =5, 5 × 37 = 185, 30 ÷ 5 =6, 6 × 26 = 156, and 30 ÷ 3 =10, 10 × 10 = 100 = 285 - 15630 = 129433010 = 4310

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We have:

$3 + 115 + 23 - 715 = 31 + 65 + 23 - 715$ 5 5, 3, 15 3 1, 3, 3 1, 1, 1 L.C.M. of 1, 5, 3 and 15 = (5 × 3) =15 $= (45 + 18 + 10 - 7)15$ {[15 ÷ 1 =15, 15 × 3 = 45], [15 ÷ 5 =3, 3 × 6 = 18], [15 ÷ 3 = 5, 5 × 2 = 10] and [15 ÷ 15 = 1, 1 × 7 = 7]} $= (73 - 7)15 = 66221 5 5 = 225 = 425$ 3 + 115 + 23 - 715 = 31 + 65 + 23 - 715 5 5, 3, 15 3 1, 3, 3 1, 1, 1 L.C.M. of 1, 5, 3 and 15 = (5 × 3) =15 = 45 + 18 + 10 - 715 15 ÷ 1 =15, 15 × 3 = 45, 15 ÷ 5 =3, 3 × 6 = 18, 15 ÷ 3 = 5, 5 × 2 = 10 and 15 ÷ 15 = 1, 1 × 7 = 7 = 73 - 715 = 6622155 =225 = 425

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Let *x* be added to 923923 to get 19.

$\therefore 923 + x = 19$Thus, we have: $x = 19 - 923 = 191 - 293$ L.C.M. of 1 and 3 is 3. $=(57 - 29)3$ {[3 ÷ 1 = 3, 3 × 19 = 57] and [3 ÷ 3 = 1, 1

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$\times 29 = 29]\}$ $= {}_{283} = 9_{13} \therefore 923 + x = 19$Thus, we have: $x = 19 - 923$ $= 191 - 293$ L.C.M. of 1 and 3 is 3. $=57 - 293$ $3 \div 1 = 3, 3 \times 19 = 57$ and $3 \div 3 = 1, 1 \times 29 = 29$ $= 283 = 9139_{23}$

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Let x be added to $6_{715}6715$ to get $8_{15}815$.
$\therefore 6_{715} + x = 8_{15}$Therefore, we have: $x = 8_{15} - 6_{715}$ $= 4_{15} - 9715$ L.C.M. of 5 and 15 $= (5 \times 3) = 15$ $=(123 - 97)15$ $\{[15 \div 5 = 3, 3 \times 41 = 123]$ and $[15 \div 15 = 1, 1 \times 97 = 97]\}$ $= 2615 = 11115 \therefore 6715 + x = 815$Therefore, we have: $x = 815 - 6715$ $= 415 - 9715$ L.C.M. of 5 and 15 $= 5 \times 3 = 15$ $=123 - 9715$ $15 \div 5 = 3, 3 \times 41 = 123$ and $15 \div 15 = 1, 1 \times 97 = 97$ $= 2615 = 11115$

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ANSWER:

$(5_{56} + 4_{19}) - (3_{59} + 3_{13}) = (356 + 379) - (329 + 103)$ 2 6, 9, 3 3 3, 9, 3 3 1, 3, 1 1, 1, 1 L.C.M. of 3, 6, 9 $= (2 \times 3 \times 3) = 18 = [105 + 74] - [64 + 60]18$ $\{[18 \div 6 = 3, 3 \times 35 = 105]$ and $[18 \div 9 = 2, 2 \times 37 = 74]\}$ $\{[18 \div 9 = 2, 2 \times 32 = 64]$ and $[18 \div 3 = 6, 6 \times 10 = 60]\} = [179] - [124]18 = 5518 = 3118$ $556 + 419 - 359 + 313 = 356 + 379 - 329 + 103$ 2 6, 9, 3 3 3, 9, 3 3 1, 3, 1 1, 1, 1 L.C.M. of 3, 6, 9 $= 2 \times 3 \times 3 = 18 = 105 + 74 - 64 + 6018$ $18 \div 6 = 3, 3 \times 35 = 105$ and $18 \div 9 = 2, 2 \times 37 = 74$ $18 \div 9 = 2, 2 \times 32 = 64$ and $18 \div 3 = 6, 6 \times 10 = 60 = 179 - 12418 = 5518 = 3118$

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ANSWER:

Let us compare 34 and 5734 and 57.
$3 \times\times 7 = 21$ and $4 \times\times 5 = 20$
Clearly, $21 > 20$
$\therefore 34 > 5734 > 57$
Required difference:
$= 34 - 57$ L.C.M. of 4 and 7 $= (2 \times 2 \times 7) = 28 = 21 - 2028$ $\{[28 \div 4 = 7, 7 \times 3 = 21]$ and $[28 \div 7 = 4, 4 \times 5 = 20]\} = 128 = 34 - 57$ L.C.M. of 4 and 7 $= 2 \times 2 \times 7 = 28 = 21 - 2028$ $28 \div 4 = 7, 7 \times 3 = 21$

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and 28 ÷ 7 = 4, 4 × 5 = 20= 128
Hence, 34 is greater than 57 by 12834 is greater than 57 by 128.

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ANSWER:

Amount of milk left with Mrs. Soni = Total amount of milk bought by her −- Amount of milk consumed
∴∴ Amount of milk left with Mrs.
Soni = $712 − 534 = 152 − 234$ L.C.M. of 2 and 4 = (2 × 2) = 4= $(30 − 23)4$
{[4 ÷ 2 = 2, 2 × 15 = 30] and [4 ÷ 4 = 1, 1 × 23 = 23]} = $74 = 134$ litre
s= 712 - 534 = 152 - 234 L.C.M. of 2 and 4 = 2 × 2 = 4= 30 - 234
4 ÷ 2 = 2, 2 × 15 = 30 and 4 ÷ 4 = 1, 1 × 23 = 23 = 74 = 134 litres

∴∴ Milk left with Mrs. Soni = 134 litres134 litres

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ANSWER:

Actual duration of the film = Total duration of the show −- Time spent on advertisements
=$(313 − 134)$ hours =$(103 − 74)$ hours L.C.M. of 3 and 4 = (2 × 2 × 3) = 12 =$(40 − 2112)$ hours {[12 ÷ 3 = 4, 4 × 10 = 40] and [12 ÷ 4 = 3, 3 × 7 = 21]} = (1912) hours = 1712 hours =313 - 134 hours =103 - 74 hours L.C.M. of 3 and 4 = 2 × 2 × 3 = 12 =40 - 2112 hours
12 ÷ 3 = 4, 4 × 10 = 40 and 12 ÷ 4 = 3, 3 × 7 = 21 = 1912 hours = 1712 hours
Thus, the actual duration of the film was 1712 hours1712 hours.

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ANSWER:

Money left with the rickshaw puller = Money earned by him in a day −- Money spent by him on food
= Rs $(13712 − 5634)$ L.C.M. of 2 and 4=(2 × 2) = 4 = Rs $(2752 − 2274)$
{[4 ÷ 2 = 2, 2 × 275 = 550] and [4 ÷ 4 = 1, 1 × 227 = 227]}= Rs $(550 − 2274)$
= Rs (3234) = Rs 8034 = Rs 13712 - 5634 L.C.M. of 2 and 4=2 × 2 = 4 = Rs 27 52 - 2274 4 ÷ 2 = 2, 2 × 275 = 550 and 4 ÷ 4 = 1, 1 × 227 = 227= Rs 550 - 2 274 = Rs 3234 = Rs 8034
Hence, Rs $8034$8034 is left with the rickshaw puller.

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ANSWER:

The length of the other piece = (Length of the wire −- Length of one piece)
$= (2\frac{3}{4} - \frac{5}{8})$ m $= (\frac{11}{4} - \frac{5}{8})$ m L.C.M. of 4 and 8 $= (2 \times 2 \times 2) = 8 = (\frac{22-5}{8})$ m $\{[8 \div 4 = 2, 2 \times 11 = 22]$ and $[8 \div 8 = 1, 1 \times 5 = 5]\} = (\frac{17}{8})$ m $= 2\frac{1}{8}$ m = 234 - 58 m =114 - 58 m L.C.M. of 4 and 8 =2 × 2 × 2 = 8 = 22 - 58 m
8 ÷ 4 = 2, 2 × 11= 22 and 8 ÷ 8 = 1, 1 × 5 = 5=178 m = 218 m
Hence, the other piece is $2\frac{1}{8}$ m218 m long.

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ANSWER:

(c) $3 \times 25 \times 2$3 × 25 × 2

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ANSWER:

(c) $8 \div 412 \div 4$8 ÷ 412 ÷ 4

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ANSWER:

(b) $\frac{2}{3}$ Factors of 24 are 1, 2, 3, 4, 6, 8, 12, 24.Factors of 36 are 1, 2, 3, 4, 6, 9, 12, 18 , 36.Common factors of 24 and 36 are 1, 2, 3, 4, 6, 12.H.C.F. =12Dividing both the nu merator and the denominator by 12: $\frac{24}{36} = 24 \div 1236 \div 12 = \frac{2}{3}$(b) 2 3 Factors of 24 are 1, 2, 3, 4, 6, 8, 12, 24.Factors of 36 are 1, 2, 3, 4, 6, 9, 12, 18, 36.Com mon factors of 24 and 36 are 1, 2, 3, 4, 6, 12.H.C.F. =12Dividing both the numerator and th e denominator by 12: 2436 = 24 ÷ 1236 ÷ 12 = 23

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ANSWER:

(a) 15

Explanation:
$(\frac{3}{4} = \frac{x}{20})$ We have: 20 = 4 × 5So, we have to multiply the numer

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ator by 5. ∴ x = 3 × 5 = 1534 = x20 We have: 20 = 4 × 5So, we hav
e to multiply the numerator by 5. ∴ x = 3 × 5 = 15

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ANSWER:

(a) 4

Explanation:
(4560 = 3x) Now, 3 = 45 ÷15So, we have to divide the denominator
by 15. ∴ x = 60 ÷ 15 = 44560 = 3x Now, 3 = 45 ÷15So, we have to di
vide the denominator by 15. ∴ x = 60 ÷ 15 = 4

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ANSWER:

(c) 18, 38, 58, 7818, 38, 58, 78

(Fractions having the same denominator are called like fractions.)

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ANSWER:

(d) none of these

In a proper fraction, the numerator is less than the denominator.

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ANSWER:

(a) 7878
In a proper fraction, the numerator is less than the denominator.

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ANSWER:

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(b) $34 > 3534 > 35$
Between the two fractions with the same numerator, the one with the smaller denominator is the greater.

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ANSWER:

(c) 3535

2 5, 3, 6, 10 5 5, 3, 3, 5 3 1, 3, 3, 1 1, 1, 1, 1 2 5, 3, 6, 10 5 5, 3, 3, 5 3 1, 3, 3, 1 1, 1, 1, 1

L.C.M. of 5, 3, 6 and 10 = (2 ×× 3 ×× 5) = 30
Thus, we have:
$35 = 3 \times 65 \times 6 = 1830\ 23 = 2 \times 103 \times 10 = 2030\ 56 = 5 \times 56 \times 5 = 2530\ 710 = 7 \times 310 \times 3 = 2130$∴ The sm allest fraction = $1830 = 3535$ = 3 × 65 × 6 = 1830 23 =2 × 103 × 10 = 2030 56 =5 × 56 × 5 = 2530 710 =7 × 310 × 3 = 2130∴ The smallest fraction = 1830 = 35

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ANSWER:

(b) 4545
Among the given fractions with the same numerator, the one with the smallest denominator is the greatest.

Page No 100:

ANSWER:

(a) 611611
Among like fractions, the fraction with the smallest numerator is the smallest.

Page No 100:

ANSWER:

(d) 712712

Explanation:
2 4, 6, 12, 3 2 2, 3, 6, 3 3 1, 3, 3, 3 1, 1, 1, 1 2 4, 6, 12, 3 2 2, 3, 6, 3 3 1, 3, 3, 3 1, 1, 1, 1

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L.C.M. of 4, 6, 12 and 3 = (2 ×× 2 ×× 3) = 12
Thus, we have:
$34 = 3 \times 34 \times 3 = 912$ $56 = 5 \times 26 \times 2 = 1012$ $23 = 2 \times 43 \times 4 = 812$ 712Clearly, 712 is the smallest fraction.34 = 3 × 34 × 3 = 912 56 =5 × 26 × 2 = 1012 23 =2 × 43 × 4 = 812 712Clearly, 712 is the smallest fraction.

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ANSWER:

(b) $235$235

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ANSWER:

(c) 4_{67}467
On dividing 34 by 7:
Quotient = 4
Remainder = 6
$347 = 4 + 67 = 4_{67}$347 = 4 +67 = 467

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ANSWER:

(b) $34$34

Explanation:
Addition of like fractions = Sum of the numerators / Common denominator
= $58 + 18 = (5 + 1)8 = 6_{3}8_{4} = 34$58 + 18 = (5 + 1)8 = 6384 = 34

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ANSWER:

(b) $12$12
Explanation:
$58 - 18 = (5 - 1)8 = 4_{1}8_{2} = 12$58 - 18 = 5 - 18 = 4182 = 12

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ANSWER:

(a) $1\frac{1}{2}$Explanation:$3\frac{3}{4} - 2\frac{1}{4} \Rightarrow \frac{15}{4} - \frac{9}{4} \Rightarrow \frac{(15-9)}{4} \Rightarrow \frac{6}{4} = \frac{3}{2} = 1\frac{1}{2}$(a) 112Explanation:334 - 214⇒154 - 94⇒(15 - 9)4⇒64 = 32 = 112

Page No 101:

ANSWER:

(d) $1\frac{1}{18}$1118

Explanation:
3 3, 6, 9 2 1, 2, 3 3 1, 1, 3 1, 1, 1 3 3, 6, 9 2 1, 2, 3 3 1, 1, 3 1, 1, 1

$\frac{56 + 23 - 49}{(\text{L.C.M. of 3, 6 and 9} = (2 \times 3 \times 3) = 18)} = \frac{(15 + 12 - 8)}{18}$
{[18 ÷ 6 = 3, 3 × 5 = 15], [18 ÷ 3 = 6, 6 × 2 = 12] and [18 ÷ 9 = 2, 2 × 4 = 8]} = $\frac{(27-8)}{18} = \frac{19}{18} = 1\frac{1}{18}$ 56 + 23 - 49 (L.C.M. of 3, 6 and 9 = 2 × 3 × 3 = 18) = 15 + 12 -
818 18 ÷ 6 = 3, 3 × 5 = 15, 18 ÷ 3 = 6, 6 × 2 = 12 and 18 ÷ 9 = 2, 2 × 4 = 8 = 27 - 818 = 1918 = 1118

Page No 101:

ANSWER:

(a) $3\frac{1}{3}$313

Explanation:
Let us compare $3\frac{1}{3}$ and $\frac{10}{3}$ or $\frac{10}{3}$ and $\frac{33}{10}$ 313 and 3310 or 103 and 3310 .
10 × 10 = 100 and 3 × 33 = 99
Clearly, 100 > 99
∴ $\frac{10}{3} > \frac{33}{10}$ or $3\frac{1}{3} > \frac{33}{10}$103>3310 or 313 >3310

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ANSWER:

A fraction is defined as a number representing a part of a whole, where the whole may be a single object or a group of objects.

Examples: $\frac{5}{7}$, $\frac{8}{5}$, $\frac{2}{3}$, $\frac{4}{3}$, $\frac{4}{9}$57 , 85 , 23 , 43 , 49

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ANSWER:

An hour has 60 minutes.
∴∴ Fraction for 35 minutes = $\frac{35}{60}\frac{12}{} = \frac{712}{}3576012 = 712$
Hence, $\frac{712}{}712$ part of an hour is equal to 35 minutes.

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ANSWER:

56 = 8 × 7
So, we need to multiply the numerator by 7.

∴∴ $\frac{58}{} = \frac{5 \times 78 \times 7}{} = \frac{3556}{}58 = 5 \times 78 \times 7 = 3556$
Hence, the required fraction is $\frac{3556}{}3556$.

Page No 103:

ANSWER:

Let OA = AB = BC = 1 unit
∴∴ OB = 2 units and OC = 3 units
Divide BC into 5 equal parts and take 3 parts out to reach point P.
Clearly, point P represents the number $2\frac{3}{5}235$.

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ANSWER:

We have:
$2\frac{4}{5} + 1\frac{3}{10} + 3\frac{1}{15} = \frac{14}{5} + \frac{13}{10} + \frac{46}{15}$ 5 5, 10, 15 2 1, 2, 3 3 1, 1, 3 1, 1, 1
L.C.M. of 5, 10 and 15 = (5 × 2 × 3) = 30 = $\frac{84 + 39 + 92}{30}$ {[30 ÷ 5 = 6, 6 × 14 = 84], [30 ÷ 10 = 3, 3 × 13 = 39] and [30 ÷ 15 = 2, 2 × 46 = 92]} = $\frac{215}{43}\frac{43}{06} = \frac{43}{6} = 7\frac{1}{6}$ 245 + 1310 + 3115 = 145 + 1310 + 4615 5 5, 10, 15 2 1, 2, 3 3 1, 1, 3 1, 1, 1 L.C.M. of 5, 10 and 15 = 5 × 2 × 3 = 30 = 84 + 39 + 9230 30 ÷ 5 = 6, 6 × 14 = 84, 30 ÷ 10 = 3, 3 × 13 = 39 and 30 ÷ 15 = 2, 2 × 46 = 92 = 21543306 = 436 = 716

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ANSWER:

Cost of a pen
= Rs 16_{23} = Rs $_{503}$ = Rs $_{50 \times 23 \times 2}$ = Rs $_{1006}$Rs 1623 = Rs 503 = Rs 50 × 23 × 2 = Rs 1006

Cost of a pencil = Rs 4_{16} = Rs $_{256}$ Rs 416 = Rs 256
$_{1006} > _{256}$ ∴ Rs 16_{23} >Rs 4_{16}1006 > 256 ∴ Rs 1623 >Rs 416
So, the cost of a pen is more than the cost of a pencil.
Difference between their costs:
= Rs $(_{503} - _{256})$ = Rs $(_{100 - 256})$ = Rs $(_{752562})$ = Rs $(_{252})$ = Rs 12_{12} = Rs 503 - 256 = Rs 100 - 256 = Rs 752562 = Rs 252 = Rs 1212
Hence, the cost of a pen is Rs 12_{12}1212 more than the cost of a pencil.

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ANSWER:

Let us compare $_{34}$ and $_{57}$34 and 57.
By cross multiplying:
3 × 7 = 21 and 4 × 5 = 20
Clearly, 21 > 20
∴$_{34} > _{57}$34>57
Their difference:
$_{34 - 57}$ L.C.M. of 4 and 7 = (2 × 2 × 7) = 28= $_{21 - 2028}$ {[28 ÷ 4 = 7, 7 × 3 = 21] and [28 ÷ 7 = 4, 4 × 5 = 20]}= $_{128}$ 34 - 57 L.C.M. of 4 and 7 = 2 × 2 × 7 = 28= 21 - 2028 28 ÷ 4 = 7, 7 × 3 = 21 and 28 ÷ 7 = 4, 4 × 5 = 20= 128
Hence, $_{34}$ is greater than $_{57}$ by $_{128}$.34 is greater than 57 by 128.

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ANSWER:

The given fractions are $_{12}$, $_{23}$, $_{49}$, $_{56}$. The given fractions are 12, 23, 49, 56.
L.C.M. of 2, 3, 9 and 6 = (2 × 3 × 3) = 18
Now, we have:
$_{12} = _{1 \times 92 \times 9} = _{918}$ $_{23} = _{2 \times 63 \times 6} = _{121849} = _{4 \times 29 \times 2} = _{818}$ $_{56} = _{5 \times 36 \times 3} = _{1518}$Hence, $_{918}$, $_{1218}$, $_{818}$ and $_{1518}$ are like fractions.12 = 1 × 92 × 9 = 918 23 = 2 × 63 × 6 = 121849 = 4 × 29 × 2 = 818 56 = 5 × 36 × 3 = 1518Hence, 918, 1218, 818 and 1518 are like fractions.

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ANSWER:

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Let $35 = 30$Let 35 = 30

30 = 5 × 6
So, we have to multiply the numerator by 6 to get the equivalent fraction having denominator 30.

$\therefore 35 = 3 \times 65 \times 6 = 1830$35 = 3 × 65 × 6 = 1830

Thus, 1830 is the equivalent fraction of 35.1830 is the equivalent fraction of 35.

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ANSWER:

The factors of 84 are 1, 2, 3, 4, 6, 7, 12, 14, 21, 28, 42, 84.
The factors of 98 are 1, 2, 7, 14, 49, 98.
The common factors of 84 and 98 are 1, 2, 7, 14.
The H.C.F. of 84 and 98 is 14.
Dividing both the numerator and the denominator by the H.C.F.:
$8498 = 84 \div 1498 \div 14 = 67$8498 = 84 ÷ 1498 ÷ 14 = 67

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ANSWER:

(b) an improper fraction

In an improper fraction, the numerator is greater than the denominator.

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ANSWER:

(a) proper fraction

In a proper fraction, the numerator is less than the denominator.

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ANSWER:

(b) $38 < 512$38<512

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Considering $\frac{3}{8}$ and $\frac{5}{12}$38 and 512:

On cross multiplying, we get:$3 \times 12 = 36$ and $8 \times 5 = 40$Clearly, $36 < 40 \therefore \frac{3}{8} < \frac{5}{12}$On cross multiplying, we get:3 × 12 = 36 and 8 × 5 = 40Clearly, 36 < 40∴ 38 < 512

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ANSWER:

(a) $\frac{2}{3}$23

Explanation:
L.C.M. of 3, 9, 2 and 12 = (2 × 2 × 3 × 3) = 36
Now, we have:
$\frac{2}{3} = \frac{2 \times 12}{3 \times 12} = \frac{24}{36}$ $\frac{5}{9} = \frac{5 \times 4}{9 \times 4} = \frac{20}{36}$ $\frac{1}{2} = \frac{1 \times 18}{2 \times 18} = \frac{18}{36}$ $\frac{7}{12} = \frac{7 \times 3}{12 \times 3} = \frac{21}{36}$Hence, $\frac{24}{36} = \frac{2}{3}$ is the largest fraction.23 = 2 × 123 × 12 = 2436 59 = 5 × 49 × 4 = 203612 = 1 × 182 × 18 = 1836 712 = 7 × 312 × 3 = 2136Hence, 2436 = 23 is the largest fraction.

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ANSWER:

(b) $2\frac{1}{4}$214
Explanation:

$3\frac{3}{4} - 1\frac{1}{2} = \frac{15}{4} - \frac{3}{2}$ (L.C.M. of 2 and 4 = (2 × 2) = 4) $= \frac{15 - 6}{4}$
$= \frac{9}{4} = 2\frac{1}{4}$334 - 112 = 154 - 32 (L.C.M. of 2 and 4 = 2 × 2 = 4)
= 15 - 64 = 94 = 214

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ANSWER:

(c) $\frac{1}{8}$, $\frac{3}{8}$, $\frac{5}{8}$, $\frac{7}{8}$18, 38, 58, 78
Like fractions have same the denominator.

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ANSWER:

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(d) 16211621

? − 821 = 821? = 821 + 821 = 1621? - 821 = 821? = 821 + 821 = 1621

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ANSWER:

(i) 923 +.....=19.....=19 − 923 .....= 191 − 293 .....=57 − 293 .....= 283 .....= 913(i) 923 +.....= 19.....=19 - 923 .....= 191 - 293 .....=57 - 293 .....= 283 .....= 913

(ii)
616− ? =2930 ? = 616 − 2930 ? = 376 − 2930 ? = 185 − 2930 ? = 15626305 ? = 515616- ? =2930 ? = 616 - 2930 ? = 376 - 2930 ? = 185 - 2930 ? = 15626305 ? = 515

(iii)
7 − 523 = 71 − 173 = 21 −173 = 43 = 1137 - 523 = 71 - 173 = 21 -173 = 43 = 113

(iv)

The factors of 72 are 1, 2, 3, 4, 6, 8, 9, 12, 18, 24, 36, 72.The factors of 90 are 1, 2, 3, 5, 6, 9, 10, 15, 18, 30, 45, 90.The common factors of 72 and 90 are 1, 2, 3, 6, 9, 18.H. C.F. of 72 and 90 is 18. 72 ÷ 1890 ÷ 18 = 45The factors of 72 are 1, 2, 3, 4, 6, 8, 9, 12, 18, 24, 36, 72.The factors of 90 are 1, 2, 3, 5, 6, 9, 10, 15, 18, 30, 45, 90.The common factors of 72 and 90 are 1, 2, 3, 6, 9, 18.H.C.F. of 72 and 90 is 18. 72 ÷ 1890 ÷ 18 = 45

(v)

4254 =79⇒42 ÷ 654 ÷ 6 = 794254 =79⇒42 ÷ 654 ÷ 6 = 79

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ANSWER:

(a) T
(b) F (81 − 116 = 48 −116 = 376 = 616)81 - 116 = 48 -116 = 376 = 616
(c) F (Because like fractions have the same denominator.)
(d) F (It lies between 0 and 1 as all proper fractions are less than 1.)
(e) T (Because it is an improper fraction, while the others are proper fractions.)

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