RS Aggarwal Solutions for Class 6 Mathematics

Fraction

Exercise 5A

Q1

Answer :

(i) The shaded portion is 3 parts of the whole figure.

$\therefore \frac{3}{4}$

(ii) The shaded portion is 1 parts of the whole figure.

$\therefore \frac{1}{4}$

(iii) The shaded portion is 2 parts of the whole figure.

$\therefore \frac{2}{3}$

(iv) The shaded portion is 3 parts of the whole figure.

$\therefore \frac{3}{10}$

(v)The shaded portion is 4 parts of the whole figure.

$\therefore \frac{4}{9}$

(vi) The shaded portion is 3 parts of the whole figure.

$\therefore \frac{3}{8}$

Q3

Answer :

The given rectangle is not divided into four equal parts.

Thus, the shaded region is not equal to $\frac{1}{4}$ of the whole.

Answer :

(i) $\frac{3}{4}$ (ii) $\frac{4}{7}$ (iii) $\frac{2}{5}$ (iv) $\frac{3}{10}$ (v) $\frac{1}{8}$
(vi) $\frac{5}{6}$ (vii) $\frac{8}{9}$ (viii) $\frac{7}{12}$

Q5

Answer :

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

Q6

Answer :

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

Q7

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

Q8

Answer :

We know: 1 hour = 60 minutes
∴ The required fraction = $\frac{24}{60} = \frac{2}{5}$

Q9

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

Q10

Answer :

(i) $\frac{2}{3}$ of 15 pens = $\left(\frac{2}{\cancel{3}_1} \times \frac{\cancel{15}^{5}}{1}\right) = 10$ pens

(ii) $\frac{2}{3}$ of 27 balls = $\left(\frac{2}{\cancel{3}_1} \times \frac{\cancel{27}^{9}}{1}\right) = 18$ balls

(iii) $\frac{2}{3}$ of 36 balloons = $\left(\frac{2}{\cancel{3}_1} \times \frac{\cancel{36}^{12}}{1}\right) = 24$ balloons

Q11

Answer :

(i) $\frac{3}{4}$ of 16 cups = $\left(\frac{3}{\cancel{4}_1} \times \frac{\cancel{16}^{4}}{1}\right) = 12$ cups

(ii) $\frac{3}{4}$ of 28 rackets = $\left(\frac{3}{\cancel{4}_1} \times \frac{\cancel{28}^{7}}{1}\right) = 21$ rackets

(iii) $\frac{3}{4}$ of 32 books = $\left(\frac{3}{\cancel{4}_1} \times \frac{\cancel{32}^{8}}{1}\right) = 24$ books

Q12

Answer :

Neelam gives $\frac{4}{5}$ of 25 pencils to Meena.

$$\left(\frac{4}{5_1} \times \frac{25^5}{1}\right) = 20 \text{ Pencils}$$

Thus, Meena gets 20 pencils.

∴ Number of pencils left with Neelam = 25 − 20 = 5 pencils

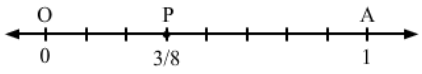
Thus, 5 pencils are left with Neelam.

Q13

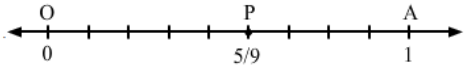
Answer :

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

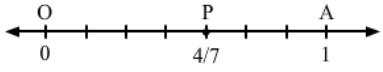
(i) Divide the number line from 0 to 1 into 8 equal parts and take out 3 parts from it to reach point P.



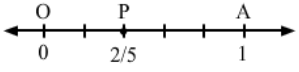
(ii) Divide the number line from 0 to 1 into 9 equal parts and take out 5 parts from it to reach point P



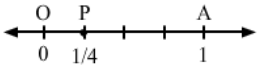
(iii) Divide the number line from 0 to 1 into 7 equal parts and take out 4 parts from it to reach point P.



(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.



RS Aggarwal Solutions for Class 6 Mathematics

Fraction

Exercise 5B

Q1.

Answer :

$\frac{1}{2}, \frac{3}{5}, \frac{10}{11}$

Q2

Answer :

A fraction whose numerator is greater than or equal to its denominator is called an improper fraction.
Hence, $\frac{3}{2}, \frac{9}{4}, \frac{8}{8}, \frac{27}{16}, \frac{19}{18}$ and $\frac{26}{26}$ are improper fractions.

Q3

Answer :

Clearly, $\frac{6}{5}, \frac{7}{5}, \frac{8}{5}, \frac{9}{5}, \frac{11}{5}$ and $\frac{12}{5}$ are improper fractions, each with 5 as the denominator.

Q4

Answer :

Clearly, $\frac{13}{2}, \frac{13}{3}, \frac{13}{4}, \frac{13}{5}, \frac{13}{6}, \frac{13}{7}$ are improper fractions, each with 13 as the numerator.

Q5

Answer :

We have:

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

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

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

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

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

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

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

(viii) $51\frac{2}{3} = \frac{(51 \times 3) + 2}{3} = \frac{155}{3}$

Q6

Answer :

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

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

(iii) On dividing 101 by 8, we get:
Quotient = 12
Remainder = 5

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

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

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

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

(viii) On dividing 117 by 20, we get:
Quotient = 5
Remainder = 17

Q7

Answer :

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

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

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

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

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

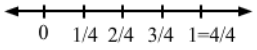
(v) $\frac{3016}{3016} \boxed{=} 1$

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

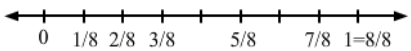
Q8

Answer :

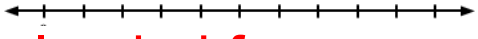
(i) Draw a number line. Mark 0 as the starting point and 1 as the ending point.
Then, divide 0 to 1 in four equal parts, where each part is equal to 1/4.
Show the consecutive parts as 1/4, 1/2, 3/4 and at 1 show 4/4 = 1.



(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.



(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)



RS Aggarwal Solutions for Class 6 Mathematics

Fraction

Exercise 5C

Q1

Answer :

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$\therefore \frac{5}{12} = \frac{10}{24} = \frac{15}{36} = \frac{20}{48} = \frac{25}{60} = \frac{30}{72}$

Q2

Answer :

The pairs of equivalent fractions are as follows:

(i) $\frac{5}{6}$ and $\frac{20}{24}$ $\left(\frac{20}{24} = \frac{5\times4}{6\times4}\right)$

(ii) $\frac{3}{8}$ and $\frac{15}{40}$ $\left(\frac{15}{40} = \frac{3\times5}{8\times5}\right)$

(iv) $\frac{2}{9}$ and $\frac{14}{63}$ $\left(\frac{14}{63} = \frac{2\times7}{9\times7}\right)$

Q3

Answer :

(i) Let $\frac{3}{5} = \frac{\square}{30}$

Clearly, 30 = 5 × 6

So, we multiply the numerator by 6.

$\therefore \frac{3}{5} = \frac{3\times6}{5\times6} = \frac{18}{30}$

Hence, the required fraction is $\frac{18}{30}$.

(ii) Let $\frac{3}{5} = \frac{24}{\square}$

Clearly, 24 = 3 × 8

So, we multiply the denominator by 8.

$\therefore \frac{3}{5} = \frac{3\times8}{5\times8} = \frac{24}{40}$

Hence, the required fraction is $\frac{24}{40}$.

Q4

Answer :

(i) Let $\frac{5}{9} = \frac{\square}{54}$

Clearly, 54 = 9 × 6

So, we multiply the numerator by 6.

$\therefore \frac{5}{9} = \frac{5\times6}{9\times6} = \frac{30}{54}$

Hence, the required fraction is $\frac{30}{54}$.

(ii) Let $\frac{5}{9} = \frac{35}{\square}$

Clearly, 35 = 5 × 7

So, we multiply the denominator by 7.

$\therefore \frac{5}{9} = \frac{5\times7}{9\times7} = \frac{35}{63}$

Hence, the required fraction is $\frac{35}{63}$.

Q5

Answer :

(i) Let $\frac{6}{11} = \frac{\square}{77}$

Clearly, 77 = 11 × 7

So, we multiply the numerator by 7.

$\therefore \frac{6}{11} = \frac{6\times7}{11\times7} = \frac{42}{77}$

Hence, the required fraction is $\frac{42}{77}$.

(ii) Let $\frac{6}{11} = \frac{60}{\square}$

Clearly, 60 = 6 × 10

So, we multiply the denominator by 10.

$\therefore \frac{6}{11} = \frac{6\times10}{11\times10} = \frac{60}{110}$

Hence, the required fraction is $\frac{60}{110}$.

Q6

Answer :

Let $\frac{24}{30} = \frac{4}{\square}$

Clearly, 4 = 24 ÷ 6

So, we divide the denominator by 6.

$\therefore \frac{24}{30} = \frac{24\div6}{30\div6} = \frac{4}{5}$

Hence, the required fraction is $\frac{4}{5}$.

Answer :

(i) Let $\frac{36}{48} = \frac{9}{\square}$

Clearly, 9 = 36 ÷ 4

So, we divide the denominator by 4.

$\therefore \frac{36}{48} = \frac{36 \div 4}{48 \div 4} = \frac{9}{12}$

Hence, the required fraction is $\frac{9}{12}$.

(ii) Let $\frac{36}{48} = \frac{\square}{4}$

Clearly, 4 = 48 ÷ 12

So, we divide the numerator by 12.

$\therefore \frac{36}{48} = \frac{36 \div 12}{48 \div 12} = \frac{3}{4}$

Hence, the required fraction is $\frac{3}{4}$.

Q8

Answer :

(i) Let $\frac{56}{70} = \frac{4}{\square}$

Clearly, 4 = 56 ÷ 14

So, we divide the denominator by 14.

$\therefore \frac{56}{70} = \frac{56 \div 14}{70 \div 14} = \frac{4}{5}$

Hence, the required fraction is $\frac{4}{5}$.

(ii) Let $\frac{56}{70} = \frac{\square}{10}$

Clearly, 10 = 70 ÷ 7

So, we divide the numerator by 7.

$\therefore \frac{56}{70} = \frac{56 \times 7}{70 \times 7} = \frac{8}{10}$

Hence, the required fraction is $\frac{8}{10}$.

Q9

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.

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

Hence, the simplest form of $\frac{9}{15}$ **is** $\frac{3}{5}$.

(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.

$\therefore \frac{48}{60} = \frac{48 \div 12}{60 \div 12} = \frac{4}{5}$

Hence, the simplest form of $\frac{48}{60}$ **is** $\frac{4}{5}$.

Q10

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, $\frac{8}{11}$ 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, $\frac{9}{14}$ 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.
Common factor of 25 and 36 is 1.
Thus, H.C.F. of 25 and 36 is 1.
Hence, $\frac{25}{36}$ is the simplest form.

Q11

Answer :

(i) 28 $\left(\frac{2}{7} = \frac{2\times4}{7\times4} = \frac{8}{28}\right)$

(ii) 21 $\left(\frac{3}{5} = \frac{3\times7}{5\times7} = \frac{21}{35}\right)$

(iii) 32 $\left(\frac{5}{8} = \frac{5\times4}{8\times4} = \frac{20}{32}\right)$

(iv) 12 $\left(\frac{45}{60} = \frac{45\div5}{60\div5} = \frac{9}{12}\right)$

(v) 5 $\left(\frac{40}{56} = \frac{40\div8}{56\div8} = \frac{5}{7}\right)$

(vi) 9 $\left(\frac{42}{54} = \frac{42\div6}{54\div6} = \frac{7}{9}\right)$

RS Aggarwal Solutions for Class 6 Mathematics

Fraction

Exercise 5D

Q1

Answer :

Like fractions:

Fractions having the same denominator are called like fractions.

Examples: $\frac{3}{11}, \frac{5}{11}, \frac{7}{11}, \frac{9}{11}, \frac{10}{11}$

Unlike fractions:

Fractions having different denominators are called unlike fractions.

Examples: $\frac{3}{4}, \frac{4}{5}, \frac{6}{7}, \frac{9}{11}, \frac{2}{13}$

Q2

Answer :

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

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:

$\frac{3}{5} = \frac{3\times6}{5\times6} = \frac{18}{30}$; $\frac{7}{10} = \frac{7\times3}{10\times3} = \frac{21}{30}$; $\frac{8}{15} = \frac{8\times2}{15\times2} = \frac{16}{30}$

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

Q4

Answer :

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) <

Q5

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) >

Q6

Answer :

$\frac{4}{5}, \frac{5}{7}$
By cross multiplying:
$5 \times 5 = 25$ and $4 \times 7 = 28$
Clearly, $28 > 25$
$\therefore \frac{4}{5} > \frac{5}{7}$

Q7

Answer :

$\frac{3}{8}, \frac{5}{6}$
By cross multiplying:
$3 \times 6 = 18$ and $5 \times 8 = 40$
Clearly, $18 < 40$
$\therefore \frac{3}{8} < \frac{5}{6}$

Q8

Answer :

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

By cross multiplying:
$7 \times 7 = 49$ and $11 \times 6 = 66$
Clearly, $49 < 66$
$\therefore \frac{7}{11} < \frac{6}{7}$

Q9

Answer :

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

By cross multiplying:

5 × 11 = 55 and 9 × 6 = 54

Clearly, 55 > 54

$\therefore \frac{5}{6} > \frac{9}{11}$

Q10

Answer :

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

By cross multiplying:

2 × 9 = 18 and 4 × 3 = 12

Clearly, 18 > 12

$\therefore \frac{2}{3} > \frac{4}{9}$

Q11

Answer :

$\frac{6}{13}$, $\frac{3}{4}$

By cross multiplying:

6 × 4 = 24 and 13 × 3 = 39

Clearly, 24 < 39

$\therefore \frac{6}{13} < \frac{3}{4}$

Q12

Answer :

$\frac{6}{13}$, $\frac{3}{4}$

By cross multiplying:

3 × 6 = 18 and 4 × 5 = 20

Clearly, 18 < 20

$\therefore \frac{3}{4} < \frac{5}{6}$

Q13

Answer :

$\frac{5}{8}$, $\frac{7}{12}$

By cross multiplying:

5 × 12 = 60 and 8 × 7 = 56

Clearly, 60 > 56

$\therefore \frac{5}{8} > \frac{7}{12}$

Q14

Answer :

L.C.M. of 9 and 6 = (3 × 3 × 2) = 18

Now, we convert $\frac{4}{9}$ and $\frac{5}{6}$ into equivalent fractions having 18 as the denominator.

$\therefore \frac{4}{9} = \frac{4\times2}{9\times2} = \frac{8}{18}$ and $\frac{5}{6} = \frac{5\times3}{6\times3} = \frac{15}{18}$

Clearly, $\frac{8}{18} < \frac{15}{18}$

$\therefore \frac{4}{9} < \frac{5}{6}$

Q15

Answer :

L.C.M. of 5 and 10 = (5 × 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.

$\therefore \frac{4}{5} = \frac{4\times2}{5\times2} = \frac{8}{10}$

Clearly, $\frac{8}{10} > \frac{7}{10}$

$\therefore \frac{4}{5} > \frac{7}{10}$

Q16

Answer :

L.C.M. of 8 and 10 = (2 × 5 × 2 × 2) = 40

Now, we convert $\frac{7}{8}$ and $\frac{9}{10}$ into equivalent fractions having 40 as the denominator.

$\therefore \frac{7}{8} = \frac{7\times5}{8\times5} = \frac{35}{40}$ and $\frac{9}{10} = \frac{9\times4}{10\times4} = \frac{36}{40}$

Clearly, $\frac{35}{40} < \frac{36}{40}$

$\therefore \frac{7}{8} < \frac{9}{10}$

Q17

Answer :

L.C.M. of 12 and 15 = (2 × 2 × 3 × 5) = 60

Now, we convert $\frac{11}{12}$ and $\frac{13}{15}$ into equivalent fractions having 60 as the denominator.

$\therefore \frac{11}{12} = \frac{11\times5}{12\times5} = \frac{55}{60}$ and $\frac{13}{15} = \frac{13\times4}{15\times4} = \frac{52}{60}$

Clearly, $\frac{55}{60} > \frac{52}{60}$

$\therefore \frac{11}{12} > \frac{13}{15}$

Q18

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 $\frac{1}{2}$, $\frac{3}{4}$, $\frac{5}{6}$ and $\frac{7}{8}$.

L.C.M. of 2, 4, 6 and 8 = (2 × 2 × 2 × 3) = 24

We convert each of the given fractions into an equivalent fraction with denominator 24.

Now, we have:

$\frac{1}{2} = \frac{1\times12}{2\times12} = \frac{12}{24}$; $\frac{3}{4} = \frac{3\times6}{4\times6} = \frac{18}{24}$

$\frac{5}{6} = \frac{5\times4}{6\times4} = \frac{20}{24}$; $\frac{7}{8} = \frac{7\times3}{8\times3} = \frac{21}{24}$

Clearly, $\frac{12}{24} < \frac{18}{24} < \frac{20}{24} < \frac{21}{24}$

$\therefore \frac{1}{2} < \frac{3}{4} < \frac{5}{6} < \frac{7}{8}$

Hence, the given fractions can be arranged in the ascending order as follows:

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

Q19

Answer :

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

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:

$\frac{2}{3} = \frac{2\times6}{3\times6} = \frac{12}{18}$; $\frac{5}{6} = \frac{5\times3}{6\times3} = \frac{15}{18}$; $\frac{7}{9} = \frac{7\times2}{9\times2} = \frac{14}{18}$

Clearly, $\frac{11}{18} < \frac{12}{18} < \frac{14}{18} < \frac{15}{18}$

$\therefore \frac{11}{18} < \frac{2}{3} < \frac{7}{9} < \frac{5}{6}$

Hence, the given fractions can be arranged in the ascending order as follows:

$\frac{11}{18}$, $\frac{2}{3}$, $\frac{7}{9}$, $\frac{5}{6}$

Q20

Answer :

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

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:
$\frac{2}{5} = \frac{2\times6}{5\times6} = \frac{12}{30}$; $\frac{7}{10} = \frac{7\times3}{10\times3} = \frac{21}{30}$; $\frac{11}{15} = \frac{11\times2}{15\times2} = \frac{22}{30}$

Clearly, $\frac{12}{30} < \frac{17}{30} < \frac{21}{30} < \frac{22}{30}$
$\therefore \frac{2}{5} < \frac{17}{30} < \frac{7}{10} < \frac{11}{15}$

Hence, the given fractions can be arranged in the ascending order as follows:
$\frac{2}{5}, \frac{17}{30}, \frac{7}{10}, \frac{11}{15}$

Q21

Answer :

The given fractions are $\frac{3}{4}, \frac{7}{8}, \frac{11}{16}$ and $\frac{23}{32}$.
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:
$\frac{3}{4} = \frac{3\times8}{4\times8} = \frac{24}{32}$; $\frac{7}{8} = \frac{7\times4}{8\times4} = \frac{28}{32}$; $\frac{11}{16} = \frac{11\times2}{16\times2} = \frac{22}{32}$

Clearly, $\frac{22}{32} < \frac{23}{32} < \frac{24}{32} < \frac{28}{32}$
$\therefore \frac{11}{16} < \frac{23}{32} < \frac{3}{4} < \frac{7}{8}$

Hence, the given fractions can be arranged in the ascending order as follows:
$\frac{11}{16}, \frac{23}{32}, \frac{3}{4}, \frac{7}{8}$

Q22

Answer :

The given fractions are $\frac{3}{4}, \frac{5}{8}, \frac{11}{12}$ and $\frac{17}{24}$.
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;
$\frac{3}{4} = \frac{3\times6}{4\times6} = \frac{18}{24}$; $\frac{5}{8} = \frac{5\times3}{8\times3} = \frac{15}{24}$; $\frac{11}{12} = \frac{11\times2}{12\times2} = \frac{22}{24}$

Clearly, $\frac{22}{24} > \frac{18}{24} > \frac{17}{24} > \frac{15}{24}$

$\therefore \frac{11}{12} > \frac{3}{4} > \frac{17}{24} > \frac{5}{8}$

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

Q23

Answer :

The given fractions are $\frac{7}{9}$, $\frac{5}{12}$, $\frac{11}{18}$ and $\frac{17}{36}$.
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:
$\frac{7}{9} = \frac{7\times4}{9\times4} = \frac{28}{36}$; $\frac{5}{12} = \frac{5\times3}{12\times3} = \frac{15}{36}$; $\frac{11}{18} = \frac{11\times2}{18\times2} = \frac{22}{36}$

Clearly, $\frac{28}{36} > \frac{22}{36} > \frac{17}{36} > \frac{15}{36}$

$\therefore \frac{7}{9} > \frac{11}{18} > \frac{17}{36} > \frac{5}{12}$

Hence, the given fractions can be arranged in the descending order as follows:
$\frac{7}{9}, \frac{11}{18}, \frac{17}{36}, \frac{5}{12}$

Q24

Answer :

The given fractions are $\frac{2}{3}$, $\frac{3}{5}$, $\frac{7}{10}$ and $\frac{8}{15}$.
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:
$\frac{2}{3} = \frac{2\times10}{3\times10} = \frac{20}{30}$; $\frac{3}{5} = \frac{3\times6}{5\times6} = \frac{18}{30}$;
$\frac{7}{10} = \frac{7\times3}{10\times3} = \frac{21}{30}$; $\frac{8}{15} = \frac{8\times2}{15\times2} = \frac{16}{30}$

Clearly, $\frac{21}{30} > \frac{20}{30} > \frac{18}{30} > \frac{16}{30}$
$\therefore \frac{7}{10} > \frac{2}{3} > \frac{3}{5} > \frac{8}{15}$

Hence, the given fractions can be arranged in the descending order as follows:
$\frac{7}{10}, \frac{2}{3}, \frac{3}{5}, \frac{8}{15}$

Q25

Answer :

The given fractions are $\frac{5}{7}$, $\frac{9}{14}$, $\frac{17}{21}$ and $\frac{31}{42}$.
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:
$\frac{5}{7} = \frac{5\times6}{7\times6} = \frac{30}{42}$; $\frac{9}{14} = \frac{9\times3}{14\times3} = \frac{27}{42}$; $\frac{17}{21} = \frac{17\times2}{21\times2} = \frac{34}{42}$

Clearly, $\frac{34}{42} > \frac{31}{42} > \frac{30}{42} > \frac{27}{42}$
$\therefore \frac{17}{21} > \frac{31}{42} > \frac{5}{7} > \frac{9}{14}$
Hence, the given fractions can be arranged in the descending order as follows:
$\frac{17}{21}, \frac{31}{42}, \frac{5}{7}, \frac{9}{14}$

Q26

Answer :

The given fractions are $\frac{1}{12}, \frac{1}{23}, \frac{1}{7}, \frac{1}{9}, \frac{1}{17}$ and $\frac{1}{50}$.
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, $\frac{1}{7} > \frac{1}{9} > \frac{1}{12} > \frac{1}{17} > \frac{1}{23} > \frac{1}{50}$
Hence, the given fractions can be arranged in the descending order as follows:
$\frac{1}{7}, \frac{1}{9}, \frac{1}{12}, \frac{1}{17}, \frac{1}{23}, \frac{1}{50}$

Q27

Answer :

The given fractions are $\frac{3}{7}, \frac{3}{11}, \frac{3}{5}, \frac{3}{13}, \frac{3}{4}$ and $\frac{3}{17}$.
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, $\frac{3}{4} > \frac{3}{5} > \frac{3}{7} > \frac{3}{11} > \frac{3}{13} > \frac{3}{17}$
Hence, the given fractions can be arranged in the descending order as follows:
$\frac{3}{4}, \frac{3}{5}, \frac{3}{7}, \frac{3}{11}, \frac{3}{13}, \frac{3}{17}$

Q28

Answer :

Lalita read 30 pages of a book having 100 pages.
Sarita read $\frac{2}{5}$ of the same book.
$\frac{2}{5}$ of 100 pages = $\frac{2}{5} \times 100 = \frac{200}{5} = 40$ pages
Hence, Sarita read more pages than Lalita as 40 is greater than 30.

Q29

Answer :

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

Q30

Answer :

Fraction of students who passed in VI A = $\frac{20}{25} = \frac{20 \div 5}{25 \div 5} = \frac{4}{5}$

Fraction of students who passed in VI B = $\frac{24}{30} = \frac{24 \div 6}{30 \div 6} = \frac{4}{5}$
In both the sections, the fraction of students who passed is the same, so both the sections have the same result.

RS Aggarwal Solutions for Class 6 Mathematics

Fraction Exercise 5E

Q1

Answer :

The given fractions are like fractions.

We know:

Sum of like fractions $= \frac{\text{Sum of the numerators}}{\text{Common denominator}}$

Thus, we have:

$$\frac{5}{8} + \frac{1}{8} = \frac{(5+1)}{8} = \frac{\cancel{6}^{3}}{\cancel{8}_{4}} = \frac{3}{4}$$

Q2

Answer :

The given fractions are like fractions.

We know:

Sum of like fractions $= \frac{\text{Sum of the numeratos}}{\text{Common denominator}}$

Thus, we have:

$$\frac{4}{9} + \frac{8}{9} = \frac{(4+8)}{9} = \frac{\cancel{12}^{4}}{\cancel{9}_{3}} = \frac{4}{3} = 1\frac{1}{3}$$

Q3

Answer :

The given fractions are like fractions.

We know:

Sum of like fractions $= \frac{\text{Sum of the numerators}}{\text{Common denominator}}$

Thus, we have:

$$1\frac{3}{5} + 2\frac{4}{5} = \frac{8}{5} + \frac{14}{5} = \frac{(8+14)}{5} = \frac{22}{5} = 4\frac{2}{5}$$

Read More:

Q4

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:

$$\frac{2}{9} = \frac{2\times 2}{9\times 2} = \frac{4}{18}; \frac{5}{6} = \frac{5\times 3}{6\times 3} = \frac{15}{18}$$

$$\therefore \frac{2}{9} + \frac{5}{6} = \frac{4}{18} + \frac{15}{18} = \frac{(4+15)}{18} = \frac{19}{18} = 1\frac{1}{18}$$

Q5

Answer :

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

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

Now, we have:

$$\frac{7}{12} = \frac{7\times 4}{12\times 4} = \frac{28}{48}; \frac{9}{16} = \frac{9\times 3}{16\times 3} = \frac{27}{48}$$

$$\therefore \frac{7}{12} + \frac{9}{16} = \frac{28}{48} + \frac{27}{48} = \frac{(28+27)}{48} = \frac{55}{48} = 1\frac{7}{48}$$

Q6

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

$$\therefore \frac{4}{15} + \frac{17}{20} = \frac{(16+51)}{60}$$

$$\{[60 \div 15 = 4, 4\times 4 = 16] \text{ and } [60 \div 20 = 3, 17\times 3 = 51]\}$$

$$= \frac{67}{60} = 1\frac{7}{60}$$

Q7

Answer :

We have:

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 $= \left(2 \times 2 \times 3\right) = 12$

$= \frac{(66 + 140)}{24}$

$\{[24 \div 4 = 6, 6 \times 11 = 66]$ and $[24 \div 6 = 4, 4 \times 35 = 140]\}$

$= \frac{\cancel{206}^{103}}{\cancel{24}_{12}} = \frac{103}{12} = 8\frac{7}{12}$

Q8

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 $= \left(2 \times 2 \times 2 \times 3\right) = 24$

$= \frac{(75 + 34)}{24}$

$\{[24 \div 8 = 3, 3 \times 25 = 75]$ and $[24 \div 12 = 2, 2 \times 17 = 34]\}$

$= \frac{109}{24} = 4\frac{13}{24}$

Q9

Answer :

We have:

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

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

$= \frac{27}{10} + \frac{53}{15}$ L.C.M. of 10 and 15 $= \left(2 \times 3 \times 5\right) = 30$

$= \frac{(81 + 106)}{30}$

$\{[30 \div 10 = 3, 3 \times 27 = 81]$ and $[30 \div 15 = 2, 2 \times 53 = 106]\}$

$= \frac{187}{30} = 6\frac{7}{30}$

Q10

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 $= \left(2 \times 3\right) = 6$

$= \frac{(22 + 11 + 12)}{6}$

$\{[6 \div 3 = 2, 2 \times 11 = 22], [6 \div 6 = 1, 1 \times 11 = 11]$ and $[6 \div 1 = 6, 6 \times 2 = 12]\}$

$= \frac{45^{15}}{\cancel{6}_{2}} = \frac{15}{2} = 7\frac{1}{2}$

Q11

Answer :

We have:

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

$3 + 1\frac{4}{15} + 1\frac{3}{20}$

$= \frac{3}{1} + \frac{19}{15} + \frac{23}{20}$ L.C.M. of 15 and 20 $= \left(2 \times 2 \times 3 \times 5\right) =$ 60

$= \frac{(180 + 76 + 69)}{60}$

$\{[60 \div 1 = 60, 60 \times 3 = 180], [60 \div 15 = 4, 4 \times 19 = 76]$ and $[60 \div 20 = 3, 3 \times 23$

$= \frac{325^{65}}{\cancel{60}_{12}} = \frac{65}{12} = 5\frac{5}{12}$

Q12

Answer :

We have:

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

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

$= \frac{10}{3} + \frac{17}{4} + \frac{37}{6}$ L.C.M. of 3, 4 and 6 $= \left(2 \times 2 \times 3\right) = 12$

$= \frac{(40 + 51 + 74)}{12}$

$\{[12 \div 3 = 4, 4 \times 10 = 40], [12 \div 4 = 3, 3 \times 17 = 51]$ and $[12 \div 6 = 2, 2 \times 37 =$

$= \frac{165^{55}}{\cancel{12}_{4}} = \frac{55}{4} = 13\frac{3}{4}$

Q13

Answer :

We have:

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

$2\frac{2}{3} + 3\frac{1}{6} + 4\frac{2}{9} + 2\frac{5}{18}$

$= \frac{2}{3} + \frac{19}{6} + \frac{38}{9} + \frac{41}{18}$ L.C.M. of 3, 6 and $9 = \left(2 \times 3 \times 3\right)$

$= 18$

$= \frac{(12 + 57 + 76 + 41)}{18}$

$\{[18 \div 3 = 6, 6 \times 2 = 12], [18 \div 6 = 3, 3 \times 19 = 57],$
$[18 \div 9 = 2, 2 \times 38 = 76]$ and $[18 \div 18 = 1, 1 \times 41 = 41]\}$

$= \frac{\cancel{180}^{31}}{\cancel{18}_{1}} = \frac{31}{3} = 10\frac{1}{3}$

Q14

Answer :

We have:

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

$2\frac{1}{3} + 1\frac{1}{4} + 2\frac{5}{6} + 3\frac{7}{12}$

$= \frac{7}{3} + \frac{5}{4} + \frac{17}{6} + \frac{43}{12}$ L.C.M. of 3, 4, 6 and 12 $= \left(2 \times 2 \times 3\right) = 12$

$= \frac{(28 + 15 + 34 + 43)}{12}$

$\{[12 \div 3 = 4, 4 \times 7 = 28], [12 \div 4 = 3, 3 \times 5 = 15],$
$[12 \div 6 = 2, 2 \times 17 = 34]$ and $[12 \div 12 = 1, 1 \times 43 = 43]\}$

$= \frac{\cancel{120}^{10}}{\cancel{12}_{1}} = 10$

Q15

Answer :

We have:

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

$2 + \frac{3}{4} + 1\frac{5}{8} + 3\frac{7}{16}$

$= \frac{2}{1} + \frac{3}{4} + \frac{13}{8} + \frac{55}{16}$ L.C.M. of 4, 8, and 16 $= \left(2 \times 2 \times 2 \times 2\right) = 16$

$= \frac{(32 + 12 + 26 + 55)}{16}$

$\{[16 \div 1 = 16, 16 \times 2 = 32], [16 \div 4 = 4, 4 \times 3 = 12],$
$[16 \div 8 = 2, 2 \times 13 = 26]$ and $[16 \div 16 = 1, 1 \times 55 = 55]\}$

$= \frac{125}{16} = 7\frac{13}{16}$

Q16

Answer :

Total cost of both articles = Cost of pencil + Cost of eraser

Thus, we have:

$\text{Rs } 3\frac{2}{5} + \text{Rs } 2\frac{7}{10} = \frac{17}{5} + \frac{27}{10} = \frac{(34+27)}{10}$

$\left(\text{L.C.M. of } 5 \text{ and } 10 = \left(5 \times 2\right) = 10\right) = \frac{61}{10} = \text{Rs } 6\frac{1}{10}$

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

Q17

Answer :

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

Thus, we have:

$\left(4\frac{1}{2} + 2\frac{2}{3}\right)\text{m} = \left(\frac{9}{2} + \frac{8}{3}\right)\text{m} \quad \left(\text{L.C.M. of } 2 \text{ and } 3 = \left(2 \times 3\right) = 6\right) = \left(\frac{(27+16)}{6}\right)\text{m}$

$\{[6 \div 2 = 3, 3 \times 9 = 27] \text{ and } [6 \div 3 = 2, 2 \times 8 = 16]\} = \left(\frac{43}{6}\right)\text{m} = 7\frac{1}{6}\text{ m}$

$\therefore$ Total length of cloth purchased = $7\frac{1}{6}\ m$

Q18

Answer :

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

Thus, we have:

$\left(4\frac{3}{4} + 1\frac{1}{2}\right)\text{ km}$

$= \left(\frac{19}{4} + \frac{3}{2}\right)\text{ km} = \left(\frac{(19+6)}{4}\right)\text{ km}$

$\left(\text{L.C.M . of } 2 \text{ and } 4 = \left(2 \times 2\right) = 4\right) = \left(\frac{25}{4}\right)\text{ km} = 6\frac{1}{4}\text{ km}$

2	2,4
2	1,2
	1,1

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

Q19

Answer :

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

Thus, we have:

$\left(16\frac{4}{5} + 14\frac{2}{3}\right)\text{ kg}$

$= \left(\frac{84}{5} + \frac{44}{3}\right)\text{ kg} \quad \left(\text{L.C.M. of } 5 \text{ and } 3 = \left(3 \times 5\right) = 15\right) = \left(\frac{(252+220)}{15}\right)\text{ kg}$

$= \left(\frac{472}{15}\right)\text{ kg} = 31\frac{7}{15}\text{ kg}$

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

RS Aggarwal Solutions for Class 6 Mathematics

Fraction

Exercise 5F

Q1

Answer :

Difference of like fractions = Difference of numerator ÷ Common denominator

$\frac{5}{8} - \frac{1}{8} = \frac{(5-1)}{8} = \frac{\cancel{4}^{1}}{\cancel{8}_{2}} = \frac{1}{2}$

Q2

Answer :

Difference of like fractions = Difference of numerator ÷ Common denominator

$\frac{7}{12} - \frac{5}{12} = \frac{(7-5)}{12} = \frac{\cancel{2}^{1}}{\cancel{12}_{6}} = \frac{1}{6}$

Q3

Answer :

Difference of like fractions = Difference of numerator ÷ Common denominator

$4\frac{3}{7} - 2\frac{4}{7} = \frac{31}{7} - \frac{18}{7}$

$= \frac{(31-18)}{7}$

$= \frac{13}{7}$

Q4

Answer :

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

$3 \mid 6, 9$

$2 \mid 2, 3$

$3 \mid 1, 3$

$\mid 1, 1$

L.C.M. of 6 and 9 = (3 × 2 × 3) = 18

Now, we have:

$\frac{5}{6} = \frac{5 \times 3}{6 \times 3} = \frac{15}{18}$; $\frac{4}{9} = \frac{4 \times 2}{9 \times 2} = \frac{8}{18}$

$\therefore \frac{5}{6} - \frac{4}{9} = \frac{15}{18} - \frac{8}{18} = \frac{(15-8)}{18} = \frac{7}{18}$

Q5

Answer :

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

L.C.M. of 2 and 8 = (2 × 2 × 2) = 8

Now, we have:

$\frac{1}{2} = \frac{1 \times 4}{2 \times 4} = \frac{4}{8}$

$\therefore \frac{1}{2} - \frac{3}{8} = \frac{4}{8} - \frac{3}{8} = \frac{(4-3)}{8} = \frac{1}{8}$

Q6

Answer :

$\frac{5}{8} - \frac{7}{12}$

$2 \mid 8, 12$

$2 \mid 4, 6$

$2 \mid 2, 3$

$3 \mid 1, 3$

$\mid 1, 1$

L.C.M. of 8 and 12 = (2 × 2× 2×3) = 24

Now, we have:

$\frac{5}{8} = \frac{5 \times 3}{8 \times 3} = \frac{15}{24}$; $\frac{7}{12} = \frac{7 \times 2}{12 \times 2} = \frac{14}{24}$

Answer :

$2\frac{7}{9} - 1\frac{8}{15}$

$= \frac{25}{9} - \frac{23}{15}$

$3 \mid 9, 15$

$3 \mid 3, 5$

$5 \mid 1, 5$

$\mid 1, 1$

L.C.M. of 9 and 15 $= \left(3 \times 3 \times 5\right) = 45$

$\therefore \frac{25}{9} - \frac{23}{15} = \frac{(125 - 69)}{45} = \frac{56}{45} = 1\frac{11}{45}$

$\{[45 \div 9 = 5, 5 \times 25 = 125]$ and $[45 \div 15 = 3, 3 \times 23 = 69]\}$

Q8

Answer :

$3\frac{5}{8} - 2\frac{5}{12}$

$= \frac{29}{8} - \frac{29}{12}$

$2 \mid 8, 12$

$2 \mid 4, 6$

$2 \mid 2, 3$

$3 \mid 1, 3$

$\mid 1, 1$

L.C.M. of 8 and 12 $= \left(2 \times 2 \times 2 \times 3\right) = 24$

$\therefore \frac{29}{8} - \frac{29}{12} = \frac{(87 - 58)}{24} = \frac{29}{24} = 1\frac{5}{24}$

$\{[24 \div 8 = 3, 3 \times 29 = 87]$ and $[24 \div 12 = 2, 2 \times 29 = 58]\}$

Q9

Answer :

$2\frac{3}{10} - 1\frac{7}{15}$

$= \frac{23}{10} - \frac{22}{15}$

$5 \mid 10, 15$

$2 \mid 2, 3$

$3 \mid 1, 3$

$\mid 1, 1$

L.C.M. of 10 and 15 $= \left(2 \times 3 \times 5\right) = 30$

$= \frac{(69 - 44)}{30}$

$\{[30 \div 10 = 3, 3 \times 23 = 69]$ and $[30 \div 15 = 2, 2 \times 22 = 44]\}$

$= \frac{\cancel{25}^{5}}{\cancel{30}_{6}}$

$= \frac{5}{6}$

Q10

Answer :

$6\frac{2}{3} - 3\frac{3}{4}$

$= \frac{20}{3} - \frac{15}{4}$ L.C.M. of 3 and 4 $= \left(2 \times 2 \times 3\right) = 12$

$= \frac{(80-45)}{12}$

$\{[12 \div 3 = 4, 4 \times 20 = 80]$ and $[12 \div 4 = 3, 3 \times 15 = 45]\}$

$= \frac{35}{12}$

$= 2\frac{11}{12}$

Q11

Answer :

$7 - 5\frac{2}{3}$

$= \frac{7}{1} - \frac{17}{3}$

L.C.M. of 1 and $3 = 3$

$= \frac{(21-17)}{3}$

$\{[3 \div 1 = 3, 3 \times 7 = 21]$ and $[3 \div 3 = 1, 1 \times 17 = 17]\}$

$= \frac{4}{3} = 1\frac{1}{3}$

Q12

Answer :

$10 - 6\frac{3}{8}$

$= \frac{10}{1} - \frac{51}{8}$

L.C.M. of 1 and $8 = 8$

$= \frac{(80-51)}{8}$

$\{[8 \div 1 = 8, 8 \times 10 = 80]$ and $[8 \div 8 = 1, 1 \times 51 = 51]\}$

$= \frac{29}{8}$

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

Q13

Answer :

We have:

$\frac{5}{6} - \frac{4}{9} + \frac{2}{3}$

L.C.M. of 3, 6 and $9 = (2 \times 3 \times 3) = 18$

$= \frac{(15-8+12)}{18}$

$\{[18 \div 6 = 3, 3 \times 5 = 15]$, $[18 \div 9 = 2, 2 \times 4 = 8]$ and $[18 \div 3 = 6, 6 \times 2 = 12]\}$

$= \frac{(27-8)}{18}$

$= \frac{19}{18}$

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

$3 \mid \underline{3, 6, 9}$

$3 \mid \underline{1, 2, 3}$

$2 \mid \underline{1, 2, 1}$

$\mid \underline{1, 1, 1}$

Q14

Answer :

We have:

$\frac{5}{8} + \frac{3}{4} - \frac{7}{12}$

$2 \mid 4, 8, 12$

$2 \mid 2, 4, 6$

$2 \mid 1, 2, 3$

$3 \mid 1, 1, 3$

$\mid 1, 1, 1$

L.C.M. of 4, 8 and 12 $= \left(2 \times 2 \times 2 \times 3\right) = 24$

$= \frac{(15 + 18 - 14)}{24}$

{[24 ÷ 8 = 3, 3 × 5 = 15], [24 ÷ 4 = 6, 6 × 3 = 18] and [24 ÷ 12 = 2, 2 × 7 =

$= \frac{(33 - 14)}{24}$

$= \frac{19}{24}$

Q15

Answer :

We have:

$\frac{2}{1} + \frac{11}{15} - \frac{5}{9}$

$3 \mid 1, 15, 9$

$3 \mid 1, 5, 3$

$5 \mid 1, 5, 1$

$\mid 1, 1, 1$

L.C.M. of 15 and $9 = \left(3 \times 3 \times 5\right) = 45$

$= \frac{(90 + 33 - 25)}{45}$

{[45 ÷ 1 = 45, 45 × 2 = 90], [45 ÷ 15 = 3, 3 × 11 = 33] and [45 ÷ 9 = 5, 5 × 5 =

$= \frac{(90 + 8)}{45} = \frac{98}{45} = 2\frac{8}{45}$

Q16

Answer :

We have:

$5\frac{3}{4} - 4\frac{5}{12} + 3\frac{1}{6}$

$= \frac{23}{4} - \frac{53}{12} + \frac{19}{6}$

L.C.M. of 4, 12 and $6 = \left(2 \times 2 \times 3\right) = 12$

$2 \mid 4, 12, 6$

$2 \mid 2, 6, 3$

$3 \mid 1, 2, 3$

$2 \mid 1, 2, 1$

$\mid 1, 1, 1$

$= \frac{(69 - 53 + 38)}{12}$

{[12 ÷ 4 = 3, 3 × 23 = 69], [12 ÷ 12 = 1, 1 × 53 = 53] and [12 ÷ 6 = 2, 2 × 19 =

$= \frac{(107 - 53)}{12} = \frac{54}{12} = \frac{9}{2} = 4\frac{1}{2}$

Q17

Answer :

We have:

$2 + 5\frac{7}{10} - 3\frac{14}{15}$

$= \frac{2}{1} + \frac{57}{10} - \frac{59}{15}$

$5 \mid 1, 10, 15$

$2 \mid 1, 2, 3$

$3 \mid 1, 1, 3$

$\mid 1, 1, 1$

$\text{L.C.M. of } 10 \text{ and } 15 = \left(2 \times 5 \times 3\right) = 30$

$= \frac{(60 + 171 - 118)}{30}$

$\{[30 \div 1 = 30, 30 \times 2 = 60], [30 \div 10 = 3, 3 \times 57 = 171] \text{ and } [30 \div 15 = 2, 2 \times 59$

$= \frac{(231 - 118)}{30} = \frac{113}{30} = 3\frac{23}{30}$

Q18

Answer :

We have:

$8 - 3\frac{1}{2} - 2\frac{1}{4}$

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

$2 \mid 1, 2, 4$

$2 \mid 1, 1, 2$

$\mid 1, 1, 1$

$\text{L.C.M. of } 1, 2 \text{ and } 4 = \left(2 \times 2\right) = 4$

$= \frac{(32 - 14 - 9)}{4}$

$\{[4 \div 1 = 4, 4 \times 8 = 32], [4 \div 2 = 2, 2 \times 7 = 14] \text{ and } [4 \div 4 = 1, 1 \times 9 = 9]\}$

$= \frac{(32 - 23)}{4} = \frac{9}{4} = 2\frac{1}{4}$

Q19

Answer :

We have:

$8\frac{5}{6} - 3\frac{3}{8} + 2\frac{7}{12}$

$= \frac{53}{6} - \frac{27}{8} + \frac{31}{12}$

$2 \mid 6, 8, 12$

$2 \mid 3, 4, 6$

$3 \mid 3, 2, 3$

$2 \mid 1, 2, 1$

$\mid 1, 1, 1$

$\text{L.C.M. of } 6, 8 \text{ and } 12 = \left(2 \times 2 \times 2 \times 3\right) = 24$

$= \frac{(212 - 81 + 62)}{24}$

$\{[24 \div 6 = 4, 4 \times 53 = 212], [24 \div 8 = 3, 3 \times 27 = 81] \text{ and } [24 \div 12 = 2, 2 \times 31 =$

$= \frac{(274 - 81)}{24} = \frac{193}{24} = 8\frac{1}{24}$

Q20

Answer :

We have:

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

$= \frac{37}{6} - \frac{26}{5} + \frac{10}{3}$

$2 \mid 6, 5, 3$

$3 \mid 3, 5, 3$

$5 \mid 1, 5, 1$

$\mid 1, 1, 1$

L.C.M. of 6, 5 and $3 = \left(2 \times 5 \times 3\right) = 30$

$= \frac{(185 - 156 + 100)}{30}$

$\{[30 \div 6 = 5, 5 \times 37 = 185], [30 \div 5 = 6, 6 \times 26 = 156]$, and $[30 \div 3 = 10, 10 \times 10$

$= \frac{(285 - 156)}{30} = \frac{\cancel{129}^{43}}{\cancel{30}_{10}} = 4\frac{3}{10}$

Q21

Answer :

We have:

$3 + 1\frac{1}{5} + \frac{2}{3} - \frac{7}{15}$

$= \frac{3}{1} + \frac{6}{5} + \frac{2}{3} - \frac{7}{15}$

$5 \mid 5, 3, 15$

$3 \mid 1, 3, 3$

$\mid 1, 1, 1$

L.C.M. of 1, 5, 3 and $15 = \left(5 \times 3\right) = 15$

$= \frac{(45 + 18 + 10 - 7)}{15}$

$\{[15 \div 1 = 15, 15 \times 3 = 45], [15 \div 5 = 3, 3 \times 6 = 18],$
$[15 \div 3 = 5, 5 \times 2 = 10]$ and $[15 \div 15 = 1, 1 \times 7 = 7]\}$

$= \frac{(73 - 7)}{15} = \frac{\cancel{66}^{22}}{\cancel{15}_{5}} = \frac{22}{5} = 4\frac{2}{5}$

Q22

Answer :

Let x be added to $9\frac{2}{3}$ to get 19.

$\therefore 9\frac{2}{3} + x = 19$

Thus, we have :

$x = 19 - 9\frac{2}{3}$

$= \frac{19}{1} - \frac{29}{3}$ L.C.M. of 1 and 3 is 3.

$= \frac{(57 - 29)}{3}$

$\{[3 \div 1 = 3, 3 \times 19 = 57]$ and $[3 \div 3 = 1, 1 \times 29 = 29]\}$

$= \frac{28}{3} = 9\frac{1}{3}$

Q23

Answer :

Let x be added to $6\frac{7}{15}$ to get $8\frac{1}{5}$.

$\therefore 6\frac{7}{15} + x = 8\frac{1}{5}$

Therefore, we have :

$x = 8\frac{1}{5} - 6\frac{7}{15}$

$= \frac{41}{5} - \frac{97}{15}$ L.C.M. of 5 and $15 = (5 \times 3) = 15$

$= \frac{(123 - 97)}{15}$

$\{[15 \div 5 = 3, 3 \times 41 = 123]$ and $[15 \div 15 = 1, 1 \times 97 = 97]\}$

$= \frac{26}{15} = 1\frac{11}{15}$

Q24

Answer :

$\left(5\frac{5}{6} + 4\frac{1}{9}\right) - \left(3\frac{5}{9} + 3\frac{1}{3}\right)$

$= \left(\frac{35}{6} + \frac{37}{9}\right) - \left(\frac{32}{9} + \frac{10}{3}\right)$

$2 \mid 6, 9, 3$

$3 \mid 3, 9, 3$

$3 \mid 1, 3, 1$

$\mid 1, 1, 1$

L.C.M. of $3, 6, 9 = (2 \times 3 \times 3) = 18$

$= \frac{[105 + 74] - [64 + 60]}{18}$

$\{[18 \div 6 = 3, 3 \times 35 = 105]$ and $[18 \div 9 = 2, 2 \times 37 = 74]\}$

$\{[18 \div 9 = 2, 2 \times 32 = 64]$ and $[18 \div 3 = 6, 6 \times 10 = 60]\}$

$= \frac{[179] - [124]}{18} = \frac{55}{18} = 3\frac{1}{18}$

Q25

Answer :

Let us compare $\frac{3}{4}$ and $\frac{5}{7}$.

$3 \times 7 = 21$ and $4 \times 5 = 20$

Clearly, $21 > 20$

$\therefore \frac{3}{4} > \frac{5}{7}$

Required difference:

$= \frac{3}{4} - \frac{5}{7}$ L.C.M. of 4 and $7 = (2 \times 2 \times 7) = 28$

$= \frac{21 - 20}{28}$

$\{[28 \div 4 = 7, 7 \times 3 = 21]$ and $[28 \div 7 = 4, 4 \times 5 = 20]\}$

$= \frac{1}{28}$

Hence, $\frac{3}{4}$ is greater than $\frac{5}{7}$ by $\frac{1}{28}$.

Q26

Answer :

Amount of milk left with Mrs. Soni = Total amount of milk bought by her — Amount of milk consumed

$\therefore$ Amount of milk left with Mrs. Soni

$= 7\frac{1}{2} - 5\frac{3}{4}$

$= \frac{15}{2} - \frac{23}{4}$ L.C.M. of 2 and $4 = (2 \times 2) = 4$

$= \frac{(30 - 23)}{4}$

$\{[4 \div 2 = 2, 2 \times 15 = 30]$ and $[4 \div 4 = 1, 1 \times 23 = 23]\}$

$= \frac{7}{4} = 1\frac{3}{4}$ litres

$\therefore$ Milk left with Mrs. Soni $= 1\frac{3}{4}$ litres

Q27

Answer :

Actual duration of the film = Total duration of the show — Time spent on advertisements

$= \left(3\frac{1}{3} - 1\frac{3}{4}\right)$ hours

$= \left(\frac{10}{3} - \frac{7}{4}\right)$ hours L.C.M. of 3 and 4 $= (2 \times 2 \times 3) = 12$

$= \left(\frac{40-21}{12}\right)$ hours

$\{[12 \div 3 = 4, 4 \times 10 = 40]$ and $[12 \div 4 = 3, 3 \times 7 = 21]\}$

$= \left(\frac{19}{12}\right)$ hours $= 1\frac{7}{12}$ hours

Thus, the actual duration of the film was $1\frac{7}{12}$ hours.

Q28

Answer :

Money left with the rickshaw puller = Money earned by him in a day — Money spent by him on food

$=$ Rs $\left(137\frac{1}{2} - 56\frac{3}{4}\right)$ L.C.M. of 2 and $4 = (2 \times 2) = 4$

$=$ Rs $\left(\frac{275}{2} - \frac{227}{4}\right)$

$\{[4 \div 2 = 2, 2 \times 275 = 550]$ and $[4 \div 4 = 1, 1 \times 227 = 227]\}$

$=$ Rs $\left(\frac{550-227}{4}\right) =$ Rs $\left(\frac{323}{4}\right) =$ Rs $80\frac{3}{4}$

Hence, Rs $80\frac{3}{4}$ is left with the rickshaw puller.

Q29

Answer :

The length of the other piece = (Length of the wire — Length of one piece)

$= \left(2\frac{3}{4} - \frac{5}{8}\right)$ m

$= \left(\frac{11}{4} - \frac{5}{8}\right)$ m L.C.M. of 4 and $8 = (2 \times 2 \times 2) = 8$

$= \left(\frac{22-5}{8}\right)$ m $\{[8 \div 4 = 2, 2 \times 11 = 22]$ and $[8 \div 8 = 1, 1 \times 5 = 5]\}$

$= \left(\frac{17}{8}\right)$ m $= 2\frac{1}{8}$ m

Hence, the other piece is $2\frac{1}{8}$ m long.

RS Aggarwal Solutions for Class 6 Mathematics

Fraction

Exercise 5G

Q1

Answer :

(c) $\frac{3 \times 2}{5 \times 2}$

Q2

Answer :

(c) $\frac{8 \div 4}{12 \div 4}$

Q3

Answer :

$\left(b\right) \frac{2}{3}$

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. $= 12$

Dividing both the numerator and the denominator by 12 :

$\frac{24}{36}$

$= \frac{24 \div 12}{36 \div 12}$

$= \frac{2}{3}$

Q4

Answer :

(a) 15

Explanation:

$\left(\frac{3}{4} = \frac{x}{20}\right)$

We have :

$20 = 4 \times 5$

So, we have to multiply the numerator by 5.

$\therefore x = 3 \times 5 = 15$

Q5

Answer :

(a) 4

Explanation:

$\left(\frac{45}{60} = \frac{3}{x}\right)$

Now, $3 = 45 \div 15$

So, we have to divide the denominator by 15.

$\therefore x = 60 \div 15 = 4$

Q6

Answer :

(c) $\frac{1}{8}, \frac{3}{8}, \frac{5}{8}, \frac{7}{8}$

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

Q7

Answer :

(d) none of these

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

Q8

Answer :

(a) $\frac{7}{}$

Q9

Answer :

(b) $\frac{3}{4} > \frac{3}{5}$

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

Q10

Answer :

(c) $\frac{3}{5}$

$$\begin{array}{r|l} 2 & 5, 3, 6, 10 \\ \hline 5 & 5, 3, 3, 5 \\ \hline 3 & 1, 3, 3, 1 \\ \hline & 1, 1, 1, 1 \end{array}$$

L.C.M. of 5, 3, 6 and 10 = (2 × 3 × 5) = 30

Thus, we have:

$\frac{3}{5} = \frac{3 \times 6}{5 \times 6} = \frac{18}{30}$

$\frac{2}{3} = \frac{2 \times 10}{3 \times 10} = \frac{20}{30}$

$\frac{5}{6} = \frac{5 \times 5}{6 \times 5} = \frac{25}{30}$

$\frac{7}{10} = \frac{7 \times 3}{10 \times 3} = \frac{21}{30}$

$\therefore$ The smallest fraction $= \frac{18}{30} = \frac{3}{5}$

Q11

Answer :

(b) $\frac{4}{5}$

Among the given fractions with the same numerator, the one with the smallest denominator is the greatest.

Q12

Answer :

(a) $\frac{6}{11}$

Among like fractions, the fraction with the smallest numerator is the smallest.

Q13

Answer :

(d) $\frac{7}{12}$

Explanation:

$$\begin{array}{r|l} 2 & 4, 6, 12, 3 \\ \hline 2 & 2, 3, 6, 3 \\ \hline 3 & 1, 3, 3, 3 \\ \hline & 1, 1, 1, 1 \end{array}$$

L.C.M. of 4, 6, 12 and 3 = (2 × 2 × 3) = 12

Thus, we have:

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

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

$\frac{2}{3} = \frac{2 \times 4}{3 \times 4} = \frac{8}{12}$

$\frac{7}{12}$

Clearly, $\frac{7}{12}$ is the smallest fraction.

Q14

Answer :

(b) $\frac{23}{}$

Answer :

(c) $4\frac{6}{7}$

On dividing 34 by 7:

Quotient = 4

Remainder = 6

$\frac{34}{7} = 4 + \frac{6}{7} = 4\frac{6}{7}$

Q16

Answer :

(b) $\frac{3}{4}$

Explanation:

Addition of like fractions = Sum of the numerators / Common denominator

$= \frac{5}{8} + \frac{1}{8} = \frac{(5+1)}{8} = \frac{\cancel{6}^{3}}{\cancel{8}_{4}} = \frac{3}{4}$

Q17

Answer :

(b) $\frac{1}{2}$

Explanation:

$\frac{5}{8} - \frac{1}{8} = \frac{(5-1)}{8} = \frac{\cancel{4}^{1}}{\cancel{8}_{2}} = \frac{1}{2}$

Q18

Answer :

$(a)\ 1\frac{1}{2}$

Explanation :

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

$\Rightarrow \frac{15}{4} - \frac{9}{4}$

$\Rightarrow \frac{(15-9)}{4}$

$\Rightarrow \frac{6}{4} = \frac{3}{2} = 1\frac{1}{2}$

Q19

Answer :

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

Explanation:

$3 \mid 3, 6, 9$

$2 \mid 1, 2, 3$

$3 \mid 1, 1, 3$

$\mid 1, 1, 1$

$\frac{5}{6} + \frac{2}{3} - \frac{4}{9}$ $\quad \left(\text{L.C.M. of } 3, 6 \text{ and } 9 = (2 \times 3 \times 3) = 18\right)$

$= \frac{(15+12-8)}{18}$

$\{[18 \div 6 = 3,\ 3 \times 5 = 15], [18 \div 3 = 6, 6 \times 2 = 12] \text{ and } [18 \div 9 = 2, 2 \times 4 = 8]\}$

$= \frac{(27-8)}{18} = \frac{19}{18} = 1\frac{1}{18}$

Q20 **Answer :**

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

Explanation:

Let us compare $3\frac{1}{3}$ and $\frac{33}{10}$ or $\frac{10}{3}$ and $\frac{33}{10}$.

10 × 10 = 100 and 3 × 33 = 99

Clearly, 100 > 99

$\therefore \frac{10}{3} > \frac{33}{10}$ or $3\frac{1}{3} > \frac{33}{10}$