Question:1

Compare the following fractions by using the symbol > or < or =:

$i\ \frac{7}{9}\ \text{and}\ \frac{8}{13}$

$ii\ \frac{11}{9}\ \text{and}\ \frac{5}{9}$

$iii\ \frac{37}{41}\ \text{and}\ \frac{19}{30}$

$iv\ \frac{17}{15}\ \text{and}\ \frac{119}{105}$

Solution:

First, we need to find the LCM of denominators in each case. After that, we will equate the denominators in order to compare the two fractions.

i

LCM of 9 and 13 is 117.

$\text{Now make both fraction equivalent with denominator as } 117\ \frac{7}{9} = \frac{7}{9} \times \frac{13}{13} \Rightarrow \frac{7}{9} = \frac{91}{117}\ \frac{8}{13} = \frac{8}{13} \times \frac{9}{9} \Rightarrow \frac{8}{13} = \frac{72}{117} \text{we know} 91 > 72 \Rightarrow \frac{91}{117} > \frac{72}{117} \Rightarrow \frac{7}{9} > \frac{8}{13}$

ii

$\text{both fraction have same denominator as } 9 \text{we know} 11 > 5 \Rightarrow \frac{11}{9} > \frac{5}{9}$

iii

$\text{LCM of } 41 \text{ and } 30 \text{ is } 1230 \text{Now convert both fraction to their equivalent fractions with denominator as } 1230\ \frac{37}{41} = \frac{37}{41} \times \frac{30}{30} \Rightarrow \frac{37}{41} = \frac{1110}{1230}\ \frac{19}{30} = \frac{19}{30} \times$

iv

LCM of 15 and 105 is 105.

$\text{Now convert fraction to its equivalent fractions with denominator as } 105\ \frac{17}{15} = \frac{17}{15} \times \frac{7}{7} \Rightarrow \frac{17}{15} = \frac{119}{105}$

Question:2

Arrange the following fractions in ascending order:

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

$ii\ \frac{4}{3}, \frac{3}{8}, \frac{6}{12}, \frac{5}{16}$

Solution:

i

$\text{LCM of the denominators } 8, 6, 4 \text{ and } 3 \text{ is } 24. \text{Now, convert all fractions into their equivalent fractions with denominator } 24.\ \frac{3}{8} = \frac{3}{8} \times \frac{3}{3} \Rightarrow \frac{3}{8} = \frac{9}{2}$

ii

$\text{LCM of the denominators } 8, 12, 16 \text{ and } 3 \text{ is } 48. \text{Now, convert all fractions into their equivalent fractions with denominator } 48.\ \frac{4}{3} = \frac{4}{3} \times \frac{16}{16} \Rightarrow \frac{4}{3} =$

Question:3

Arrange the following fractions in descending order:

$i\ \frac{4}{5}, \frac{7}{10}, \frac{11}{15}, \frac{17}{20}$

$ii\ \frac{2}{7}, \frac{11}{35}, \frac{9}{14}, \frac{13}{28}$

Solution:

i

$\text{LCM of the denominators } 5, 10, 15 \text{ and } 20 \text{ is } 60. \text{Now, convert all fractions to their equivalent fractions with denominator } 60.\ \frac{4}{5} = \frac{4}{5} \times \frac{12}{12} = \frac{48}{60}$

ii

$\text{LCM of the denominators } 7, 35, 14 \text{ and } 28 \text{ is } 140. \text{Now, convert all fractions to their equivalent fractions with denominator } 140.\ \frac{2}{7} = \frac{2}{7} \times \frac{20}{20} =$

Question:4

Write five equivalent fractions of $\frac{3}{5}$.

Solution:

Five equivalent fractions of $\frac{3}{5}$ are:

$\text{(i)}\ \frac{3}{5} = \frac{3}{5} \times \frac{2}{2} \Rightarrow \frac{3}{5} = \frac{6}{10}\ \text{(ii)}\ \frac{3}{5} = \frac{3}{5} \times \frac{3}{3} \Rightarrow \frac{3}{5} = \frac{9}{15}\ \text{(iii)}\ \frac{3}{5} = \frac{3}{5} \times \frac{4}{4} \Rightarrow \frac{3}{5} = \frac{12}{20}\ \text{(iv)}\ \frac{3}{5} = \frac{3}{5} \times \frac{5}{5} \Rightarrow \frac{3}{5} = \frac{15}{25}\ \text{(v)}\ \frac{3}{5} = \frac{3}{5} \times \frac{6}{6} \Rightarrow \frac{3}{5} = \frac{18}{30}$

Question:5

Find the sum:

$i\ \frac{5}{8} + \frac{3}{10}$

$ii\ 4\frac{3}{4} + 9\frac{2}{5}$

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

$iv\ 2\frac{3}{5} + 4\frac{7}{10} + 2\frac{4}{15}$

Solution:
i

$\frac{5}{8}+\frac{3}{10}\ LCM\ of\ 8,10\ \ is\ 40. \Rightarrow \frac{(5\times5)+(3\times4)}{40}=\frac{37}{40}$
ii

$4\frac{3}{4}+9\frac{2}{5}\ or\ \frac{(4\times4)+3}{4}+\frac{(9\times5)+2}{5} \Rightarrow \frac{19}{4}+\frac{47}{5}\ LCM\ of\ 5,4\ is\ 20. \frac{(19\times5)+(47\times4)}{20}=\frac{283}{20}$
iii

$\frac{5}{6}+3+\frac{3}{4}\ \ LCM\ of\ 6,4\ is\ 24. \frac{(5\times4)+(3\times24)+(3\times6)}{24}=\frac{110}{24}$
iv

$2\frac{3}{5}+4\frac{7}{10}+2\frac{4}{15}\ \ or\ \ \frac{(2\times5)+3}{5}+\frac{(4\times10)+7}{10}+\frac{(2\times15)+4}{15} \Rightarrow \frac{13}{5}+\frac{47}{10}+\frac{34}{15}\ LCM\ of\ 15,10\ and\ 5\ is\ 30. \frac{(13\times6)+(47\times3)+(34\times2)}{30}=\frac{287}{30}$

Question:6

Find the difference of

$i\ \frac{13}{24}\ \text{and}\ \frac{7}{16}$

$ii\ 6\ \text{and}\ \frac{23}{3}$

$iii\ \frac{21}{25}\ \text{and}\ \frac{18}{20}$

$iv\ 3\frac{3}{10}\ \text{and}\ 2\frac{7}{15}$

Solution:

i

$\frac{13}{24}-\frac{7}{16}\ LCM\ of\ 24\ and\ 16\ is\ 48. \frac{(13\times2)-(7\times3)}{48}=\frac{5}{48}$

ii

$\frac{23}{3}-6 LCM\ of\ 3\ and\ 1\ is\ 3. \frac{(23\times1)-(6\times3)}{3}=\frac{5}{3}$

iii

$\frac{18}{20}-\frac{21}{25}\ LCM\ of\ 20,25\ is\ 100. \Rightarrow \frac{(18\times5)-(21\times4)}{100}=\frac{6}{100}=\frac{3}{50}$

iv

$3\frac{3}{10}-2\frac{7}{15} \Leftrightarrow \frac{(3\times10)+3}{10}-\frac{(2\times15)+7}{15} \Leftrightarrow \frac{33}{10}-\frac{37}{15}\ LCM\ of\ 10\ and\ 15\ is\ 30. \frac{(33\times3)-(37\times2)}{30}=\frac{25}{30} \Leftrightarrow \frac{5}{6}$

Question:7

Find the difference:

$i\ \frac{6}{7}-\frac{9}{11}$

$ii\ 8-\frac{5}{9}$

$iii\ 9-5\frac{2}{3}$

$iv\ 4\frac{3}{10}-1\frac{2}{15}$

Solution:

i

$\frac{6}{7}-\frac{9}{11}\ LCM\ of\ 7\ and\ 11\ is\ 77. \Rightarrow \frac{6}{7}-\frac{9}{11} \Leftrightarrow \frac{(6\times11)-(9\times7)}{77} \Leftrightarrow \frac{3}{77}$

ii

$8-\frac{5}{9}\ LCM\ of\ 1\ and\ 9\ is\ 9. \Rightarrow \frac{8}{1}-\frac{5}{9} \Leftrightarrow \frac{(8\times9)-(5\times1)}{9} \Leftrightarrow \frac{67}{9}$

iii

$9-5\frac{2}{3} \Leftrightarrow \frac{9}{1}-\frac{(5\times3)+2}{3}\ LCM\ of\ 1\ and\ 3\ is\ 3. \Rightarrow \frac{9}{1}-\frac{17}{3} \Leftrightarrow \frac{(9\times3)-(17\times1)}{3} \Leftrightarrow \frac{10}{3}$

iv

$4\frac{3}{10}-1\frac{2}{15} \Leftrightarrow \frac{(4\times10)+3}{10}-\frac{(15\times1)+2}{15}\ LCM\ of\ 10\ and\ 15\ is\ 30. \Rightarrow \frac{43}{10}-\frac{17}{15} \Leftrightarrow \frac{(43\times3)-(17\times2)}{30} \Leftrightarrow \frac{95}{30} \Leftrightarrow \frac{19}{6}$

Question:8

Simplify:

$i\ \frac{2}{3}+\frac{1}{6}-\frac{2}{9}$

$ii\ 12-3\frac{1}{2}$

$iii\ 7\frac{5}{6}-4\frac{3}{8}+2\frac{7}{12}$

Solution:

i

$\frac{2}{3}+\frac{1}{6}-\frac{2}{9}\ \text{LCM of 3. 6 and 9 is 18.}=\frac{2}{3}+\frac{1}{6}-\frac{2}{9}=\frac{(2\times6)+(1\times3)-(2\times2)}{18}=\frac{11}{18}$

ii

$12-3\frac{1}{2}=\frac{12}{1}-\frac{(3\times2)+1}{2}\text{LCM of 2 and 1 is 2.}=\frac{12}{1}-\frac{7}{2}=\frac{(12\times2)-(7\times1)}{2}=\frac{17}{2}$

iii

$7\frac{5}{6}-4\frac{3}{8}+2\frac{7}{12}=\frac{(7\times6)+5}{6}-\frac{(4\times8)+3}{8}+\frac{(2\times12)+7}{12}\text{LCM of 6,8 and 12 is 24.}=\frac{47}{6}-\frac{35}{8}+\frac{31}{12}=\frac{(47\times4)-(35\times3)+(31\times2)}{24}=\frac{145}{24}$

Question:9

What should be added to $5\frac{3}{7}$ to get 12?

Solution:

Let *x* be the required fraction.

According to the question:

$x+5\frac{3}{7}=12\Rightarrow x+\frac{(5\times7)+3}{7}=12\Rightarrow x=12-\frac{38}{7}\Rightarrow x=\frac{(12\times7)-(38\times1)}{7}\Leftrightarrow\frac{46}{7}$

Question:10

What should be added to $5\frac{4}{15}$ to get $12\frac{3}{5}$?

Solution:

Let *x* be the required fraction.

According to the question:

$x+5\frac{4}{15}=12\frac{3}{5}\Rightarrow x+\frac{(15\times5)+4}{15}=\frac{(12\times5)+3}{5}\Rightarrow x=\frac{63}{5}-\frac{79}{15}LCM\ of\ 5\ and\ 15\ is\ 15.\Rightarrow x=\frac{(63\times3)-(79\times1)}{15}\Leftrightarrow\frac{110}{15}\Rightarrow x=\frac{110}{15}\Leftrightarrow\frac{22}{3}$

Question:11

Suman studies for $5\frac{2}{3}$ hours daily. She devotes $2\frac{4}{5}$ hours of her time for Science and Mathematics. How much time does she devote for other subjects?

Solution:

Suman studies for $5\frac{2}{3}\text{hours}$ daily. Therefore, we have

$5\frac{2}{3}\text{hours}=\frac{(5\times3)+2}{3}=\frac{17}{3}\text{hours}$

She studies science and mathematics for $2\frac{4}{5}\text{hours}$. Therefore, we have

$2\frac{4}{5}\text{hours}=\frac{(2\times5)+4}{5}=\frac{14}{5}\text{hours}$

Time devoted to other subjects = Total study time $-$ Time devoted to science and mathematics

$=\frac{17}{3}-\frac{14}{5}=\frac{(17\times5)-(14\times3)}{15}=\frac{43}{15}\text{hours}$

Question:12

A piece of wire is of length $12\frac{3}{4}\text{m}$. If it is cut into two pieces in such a way that the length of one piece is $5\frac{1}{4}\text{m}$, what is the length of the other piece?

Solution:

Let the length of second piece be *x*.

Total length of wire = Length of one piece + Length of second piece

$12\frac{3}{4}=5\frac{1}{4}+x\Rightarrow\frac{(12\times4)+3}{4}=\frac{(5\times4)+1}{4}+x\Rightarrow x=\frac{(12\times4)+3}{4}-\frac{(5\times4)+1}{4}\Rightarrow x=\frac{51}{4}-\frac{21}{4}\Leftrightarrow\frac{30}{4}\Rightarrow x=\frac{30}{4}\Leftrightarrow\frac{15}{2}$

Question:13

A rectangular sheet of paper is $12\frac{1}{2}\ \text{cm}$ long and $10\frac{2}{3}\ \text{cm}$ wide. Find its perimeter.

Solution:

Perimeter of rectangle = $2length+width$

$2\times\left[12\frac{1}{2}+10\frac{2}{3}\right]=2\times\left[\frac{(12\times2)+1}{2}+\frac{(10\times3)+2}{3}\right]=2\times\left[\frac{(25\times3)+(32\times2)}{6}\right]=2\times\left[\frac{139}{6}\right]=\frac{139}{3}\ \text{cm}$

Question:14

In a "magic square", the sum of the numbers in each row, in each column and along the diagonal is the same. Is this a magic square?

$\frac{4}{11}$	$\frac{9}{11}$	$\frac{2}{11}$
$\frac{3}{11}$	$\frac{5}{11}$	$\frac{7}{11}$

$\frac{8}{11}$	$\frac{1}{11}$	$\frac{6}{11}$

Solution:

$\text{Sum along columns and rows}: \frac{4}{11}+\frac{9}{11}+\frac{2}{11}=\frac{15}{11}\ \frac{3}{11}+\frac{5}{11}+\frac{7}{11}=\frac{15}{11}\ \frac{8}{11}+\frac{1}{11}+\frac{6}{11}=\frac{15}{11}\ \frac{4}{11}+\frac{3}{11}+\frac{8}{11}=\frac{15}{11}\ \frac{9}{11}+\frac{5}{11}+\frac{1}{11}=\frac{15}{11}\ \frac{2}{11}+\frac{7}{11}+\frac{6}{11}=\frac{15}{11}\ \text{Sum along}$

Question:15

The cost of Mathematics book is Rs and that of Science book is Rs . Which costs more and by how much?

Solution:

Question:16

i Provide the number in box and also give its simplest from in each of the following:

i

ii .

Solution:

i

ii

Question:17

Multiply:

i

ii

iii

iv

Solution:

i

ii

iii

iv

Question:18

Find the product:

i

ii

iii

iv

Solution:

i

ii

iii

iv

Question:19

Simplify:

i

ii

iii

Solution:

i

ii

iii

Question:20

Find:

i

ii

iii

Solution:

Question:21

Which is greater?

Solution:

Question:22

Find:

i of Rs 330

ii of 108 metres

iii of 42 litres

iv of an hour

v of an year

vi of a kg

vii of a litre

viii of a day

ix of a week

Solution:

Question:23

Shikha plants 5 saplings in a row in her garden. The distance between two adjacent saplings is . Find the distance between the first and the last sapling.

Solution:

Distance between the first and second saplings =

Distance between the first and third saplings =

Distance between the first and fourth saplings **=**

Distance between the first and fifth saplings = 4 ×

Question:24

Ravish reads part of a book in 1 hour. How much part of the book will he read in houurs?

Solution:

Question:25

Lipika reads a book for hours everyday. She reads the entire book in 6 days. How many hours in all were required by her to read the book?

Solution:

In one day, Lipika reads for .

Total hours required =

Question:26

Find the area of a rectangular park which is long and broad.

Solution:

Question:27

If milk is available at Rs per litre, find the cost of litres of milk.

Solution:

Cost of 1 litre milk =

Question:28

Sharda can walk in one hour. How much distance will she cover in hours?

Solution:

Distance covered by Sharda in 1 hour = km

Distance covered by Sharda in = Distance covered in 1 hour

Distance covered by Sharda in =

Question:29

A sugar bag contains 30 kg of sugar. After consuming of it, how much sugar is left in the bag?

Solution:

Question:30

Each side of a square is long. Find its area.

Solution:

Question:31

There are 45 students in a class and of them are boys. How many girls are there in the class?

Solution:

Question:32

Find the reciprocal of each of the following fractions and classify them as proper, improper and whole numbers:

i

ii

iii

iv

v

vi

Solution:

Reciprocal of a non-zero fraction

i

ii

iii

iv

v

vi

Question:33

Divide:

i

ii

iii

iv

Solution:

i

ii

iii

iv

Question:34

Divide:

i

ii

iii

iv

Solution:

i

ii

iii

iv

Question:35

Simplify:

i

ii

iii

iv

Solution:

i

ii

iii

iv

Question:36

A wire of length is cut into 10 pieces of equal length. Find the length of each piece.

Solution:

Length of one piece =

Length of one piece =

Question:37

The length of a rectangular plot of area . What is the width of the plot?

Solution:

Area of rectangle = Length of rectangle Width of rectangle

Question:38

By what number should be multiplied to get ?

Solution:

Let the required number be *x*.

According to the question:

Question:39

The product of two numbers is . If one of the numbers is , find the other.

Solution:

Let the required number be *x*.

According to the question:

Question:40

The cost of of apples is Rs 400. At what rate per kg are the apples being sold?

Solution:

Cost of of apples = Rs. 400

Cost of 1 kg of apples =

Question:41

By selling oranges at the rate of Rs per orange, a fruit-seller gets Rs 630. How many dozens of oranges does he sell?

Solution:

Cost of 1 orange =

Number of oranges sold =

12 oranges = 1 dozen

120 oranges =

Question:42

In mid-day meal scheme litre of milk is given to each student of a primary school. If 30 litres of milk is distributed every day in the school, how many students are there in the school?

Solution:

Number of students in the school =

Question:43

In a charity show Rs 6496 were collected by selling some tickets. If the price of each ticket was Rs , how many tikets were sold?

Solution:

Number of tickets sold =

Price of one ticket:

Number of tickets sold =

Question:44

Mark the correct alternative in each of the following:

If a fraction is a lowest terms, then HCF of *a* and *b* is

a *a* b *b* c 1 d *ab*

Solution:

We know that a fraction is in its lowest terms if its numerator and denominator have no common factor other than 1.

Thus, if the fraction is in its lowest terms, then the HCF of *a* and *b* is 1.

Hence, the correct answer is option c.

Question:45

Mark the correct alternative in each of the following:

The fraction in its lowest terms is

a b c d

Solution:

Factors of 84: 1, 2, 3, 4, 6, 7, 12, 14, 21, 28, 42, 84

Factors of 98: 1, 2, 7, 14, 49, 98

Common factors of 84 and 98: 1, 2, 14

∴ HCF of 84 and 98 = 14

Now,

Dividing numerator and denominator by the HCF of 84 and 98 i.e. 14

Hence, the correct answer is option c.

Question:46

Mark the correct alternative in each of the following:

Which of the following is a vulgar fraction?

a b c d

Solution:

The fractions with denominator not equal to 10, 100, 1000 etc are called vulgar fractions.

Thus, the fraction is a vulgar fraction.

Hence, the correct answer is option d.

Question:47

Mark the correct alternative in each of the following:

Which of the following fraction is an irreducible or in its lowest terms?

a b c d

Solution:

We know that a fraction is irreducible or is in its lowest terms if the HCF of its numerator and denominator is 1.

Consider the fraction .

HCF of 91 and 104 = 13 ≠ 1

So, the fraction is reducible.

Consider the fraction .

HCF of 105 and 112 = 7 ≠ 1

So, the fraction is reducible.

Consider the fraction .

HCF of 51 and 85 = 17 ≠ 1

So, the fraction is reducible.

Now,

Consider the fraction .

HCF of 43 and 83 = 1

So, the fraction is irreducible or is in its lowest terms.

Hence, the correct answer is option d.

Question:48

Mark the correct alternative in each of the following:

Which of the following is a proper fraction?

a b c d

Solution:

A fraction whose numerator is less than the denominator is called a proper fraction.

The numerator in each of the fractions , , is more than the denominator, so these fractions are improper fractions.

The numerator of the fraction is less than the denominator, so this fraction is a proper fraction.

Hence, the correct answer is option a.

Question:49

Mark the correct alternative in each of the following:

The reciprocal of the fraction is

a b c d

Solution:

The reciprocal of a non-zero fraction is the fraction .

Now,

Reciprocal of the fraction =

∴ Reciprocal of the fraction =

Hence, the correct answer is option c.

Question:50

Mark the correct alternative in each of the following:

a b 2 c d

Solution:

Hence, the correct answer is option b.

Question:51

Mark the correct alternative in each of the following:

a b c d

Solution:

Hence, the correct answer is option c.

Question:52

Mark the correct alternative in each of the following:

By what number should be divided to get ?

a b c d

Solution:

Let the required number be *x*.

Now,

Thus, the required number is .

Hence, the correct answer is option c.

Question:53

Mark the correct alternative in each of the following:

By what number be multiplied to get ?

a b c d None of these

Solution:

Product of two numbers =

One of the numbers =

∴ Other number = Product of two numbers ÷ One of the numbers

Hence, the correct answer is option d.

Question:54

Mark the correct alternative in each of the following:

a b 2 c d

Solution:

Hence, the correct answer is option c.

Question:55

Mark the correct alternative in each of the following:

The fraction equivalent to is

a b c d

Solution:

The given fraction is .

We know that if and are two equivalent fractions, then

Now,

So, the fractions and are equivalent fractions.

Thus, the fraction equivalent to is .

Hence, the correct answer is option c.

Question:56

Mark the correct alternative in each of the following:

By what number be multiplied to get 42?

a b c d

Solution:

Product of two numbers = 42

One of the numbers =

∴ Other number = Product of two numbers ÷ One of the numbers

Hence, the correct answer is option a.

Question:57

Mark the correct alternative in each of the following:

Which of the following statements is true?

a b c d None of these

Solution:

Consider the fractions and .

Prime factorisation of 12 = 2 × 2 × 3

Prime factorisation of 21 = 3 × 7

∴ LCM of 12 and 21 = 2 × 2 × 3 × 7 = 84

Firstly, convert the fractions to equivalent fractions with denominator 84.

Now,

49 > 16

Hence, the correct answer is option c.

Question:58

Mark the correct alternative in each of the following:

Which one of the following is the correct statement?

a b c d

Solution:

Consider the fractions , and .

LCM of 4, 3 and 15 = 60

Firstly, convert the fractions into equivalent fractions with denominator 60.

Now,

40 < 45 < 48

Hence, the correct answer is option b.

Question:59

Mark the correct alternative in each of the following:

Which of the following fractions lies between and ?

a b c d None of these

Solution:

Consider the fractions , , , and .

LCM of 3, 4, 5, 6 and 7 = 420

Firstly, convert the fractions into equivalent fractions with denominator 420.

Now,

280 < 300 < 315 < 336 < 350

Thus, none of the fractions , , lies between the fractions and .

Hence, the correct answer is option d.

Question:60

Mark the correct alternative in each of the following:

Which one of the following is true?

a b

c d

Solution:

Consider the fractions , , and .

LCM of 2, 4, 13 and 17 = 884

Firstly, convert the fractions into equivalent fractions with denominator 884.

Now,

442 < 612 < 624 < 663

Hence, the correct answer is option d.

Question:61

Mark the correct alternative in each of the following:

The smallest of the fractions and is

a b c d

Solution:

The given fractions are and .

LCM of 3, 7, 9 and 11 = 693

Firstly, convert the fractions into equivalent fractions with denominator 693.

Now,

385 < 396 < 462 < 504

Thus, the smallest of the given fractions is .

Hence, the correct answer is option d.

Question:62

Mark the correct alternative in each of the following:

a 1 b –1 c –3 d 3

Solution:

Since the number of negative terms in the product is odd. Therefore, their product is negative.

Hence, the correct answer is option b.

Question:63
Mark the correct alternative in each of the following:

Which of the following is correct?

a b c d
Solution:
Consider the fractions , and .

LCM of 3, 5 and 15 = 15

Firstly, convert the fractions into equivalent fractions with denominator 15.

Now,

9 < 10 < 11

Hence, the correct answer is option b.

Question:64
Mark the correct alternative in each of the following:

Which is the smallest of the following fractions?

a b c d
Solution:
Consider the fractions , , and .

LCM of 4, 5, 7 and 9 = 1260

Firstly, convert the fractions into equivalent fractions with denominator 1260.

Now,

315 < 504 < 540 < 560

Thus, the smallest fraction is .

Hence, the correct answer is option d.

Question:65
Mark the correct alternative in each of the following:

The difference between the greatest and the least fractions out of and is

a b c d
Solution:

Consider the fractions and .

LCM of 7, 8, 9 and 10 = 2520

Firstly, convert the fractions into equivalent fractions with denominator 2520.

Now,

2160 < 2205 < 2240 < 2268

So,

Greatest fraction =

Least fraction =

∴ Required difference

Disclaimer: None of the options given in the question matches with the answer.

Question:66

Mark the correct alternative in each of the following:

Which of the following fractions is greater than and less than ?

a b c d

Solution:

Consider the fractions and .

LCM of 2, 3, 4, 5, 6 and 10 = 60

Firstly, convert the fractions into equivalent fractions with denominator 60.

Now,

30 < 40 < 45 < 48 < 50 < 54

Thus, the fraction is greater than and less than .

Hence, the correct answer is option c.

Question:67

Mark the correct alternative in each of the following:

Which of the following fractions is more than one-third?

a b c d

Solution:

Let and be two fractions. Then, if .

Consider the fractions and .

Consider the fractions and .

Consider the fractions and .

Consider the fractions and .

Thus, the fractions and are more than the fraction .

Hence, the correct answers are options c and d.

Disclaimer: There are two correct options in the question. One of the two options among c and d must be changed accordingly to get only one correct answer.