VIII Revision

1) Profit =
C.P =
S.P =
Profit % =
S.P =
C.P =

2) Loss =
S.P =
C.P =
loss % =
S.P =
C.P =

3) discount =
discount %
S.P =
M.P =

4) Subtract the additive inverse of $\frac{6}{7}$ from the multiplicative inverse of $-\frac{4}{5} \times \frac{15}{16}$

5) $-\frac{5}{9} + \frac{5}{9} =$ ___ (a) 1 (b) 0 (c) $\frac{10}{18}$

6) $0 \div \frac{15}{48} =$ ___ (a) 0 (b) $-\frac{15}{48}$ (c) not defined

7) ___ is a rational number between x and y.

8) ___ is the only number which is its own negative

9) The product of two rational numbers is $\frac{117}{40}$. If one of them is $-\frac{13}{5}$, find the other.

10) What should be added to $-\frac{9}{7}$ to get $\frac{16}{5}$?

11) The value of $\frac{0}{0}$ is ___

12) Which of the following do not lie between -1 and -2?
(a) $-\frac{4}{5}$ (b) $-\frac{16}{10}$ (c) $-\frac{15}{10}$ (d) $-\frac{13}{10}$

13) The identity element of addition for a rational number is
(a) 0 (b) 1 (c) -1 (d) 10

14) In a rational number $\frac{p}{q}$, q can be:
(a) -1 (b) 1 (c) 0 (d) any non-zero integer.

15) Which number is multiplicative identity element in rational numbers? (a) 0 (b) -1 (c) 1 (d) 10

16) Which of the following number is not a rational number?
(a) $\frac{3}{7}$ (b) $\frac{-3}{-5}$ (c) $\frac{0}{5}$ (d) $\frac{5}{0}$

17) How many rational numbers lie between $\frac{1}{3}$ and $\frac{1}{2}$?
(a) one (b) two (c) infinite (d) finite

18) After reading $\frac{7}{9}$ of a book, 40 pages are left. How many pages are there in the book?

19) In a school, $\frac{5}{8}$ of students are boys. If there are 240 girls, find the number of boys in the school.

20) $-1\frac{1}{6} \times 1\frac{2}{9} = \frac{11}{9} \times x$. Find x.

21) Represent $-\frac{5}{4}$ on the number line

22) Find the three rational numbers between -2 and -3

23) Subtraction of two rational numbers is not ___ and ___

24) The rational number which is equal to its negative is ___

25) The reciprocal of a negative rational number is a _____ rational number.

26) Zero has ___ reciprocal

27) $\frac{-3}{5}$ and $\frac{3}{-5}$ represent the ___ rational number

28) If a rational no. is >1, its ~~not~~ reciprocal is ___ than 1

29) The rational numbers which are equal to their reciprocals are ___ and ___

30) The product of a rational no. and its multiplicative inverse is ___

31) From a rope 40m long, pieces of equal size are cut, If the ~~four~~ length of one pieces is $3\frac{1}{3}$ m, find the no. of such pieces

32) Divide the sum of $\frac{43}{12}$ and $\frac{7}{3}$ by their difference

33) Find x:
$$\frac{-12}{5} \div x = \frac{-12}{35}$$

34) Are rational numbers always commutative under division

35) ___ $\div \frac{11}{13} = \frac{11}{13}$

36) The reciprocal of -1 is ___

37) Verify $x + (y+z) = (x+y) + z$; where $x = \frac{2}{5}$, $y = \frac{-4}{3}$, $z = \frac{8}{9}$

38) $\frac{5}{-4} + \_\_ = \frac{5}{-4}$

39) $\left(\frac{3}{-5} + \frac{2}{-8}\right) + \_\_ = \frac{3}{-5} + \left(\frac{4}{-7} + \frac{2}{-8}\right)$

40) If $\frac{3}{5}$ of a number exceeds its $\frac{2}{7}$ by 44, find the number.

41) Rita had Rs 300. She spent $\frac{1}{3}$ of her money on notebooks and $\frac{1}{4}$ of the remainder on stationary items. How much money is left with her?

42) An aeroplane covers 1020 km in an hour. How much distance will it cover in $4\frac{1}{6}$ hours?

43) The area of a room is $65\frac{1}{4}$ m². If its breadth is $5\frac{7}{16}$ metres. What is its length?

44) On one day a rickshaw puller earned Rs 80. Out of his earnings he spent ₹ $13\frac{3}{5}$ on tea and snacks, ₹ $25\frac{1}{2}$ on food and ₹ $4\frac{2}{5}$ on repairs. How much did he save?

45) Using appropriate properties, find

(i) $-\frac{2}{3} \times \frac{3}{5} + \frac{5}{2} - \frac{3}{5} \times \frac{1}{6}$

(ii) $\frac{2}{5} \times \frac{-3}{7} - \frac{1}{6} \times \frac{3}{2} + \frac{1}{14} \times \frac{2}{5}$

4.E

1) The value of x to make the statement $8x - 6a = 18a$ true is
   (a) $3a$ (b) 5 (c) $4a$
2) I am five times as old as my grandson. If the difference in our ages is 48 years, the age of my son is
   (a) 8 years (b) 48 years (c) 12 years.
3) If $\frac{5y+7}{6} = 0$, then value of y is (a) $\frac{5}{7}$ (b) $\frac{7}{5}$ (c) $-\frac{7}{5}$
4) One of the angles of a $\triangle$ is equal to the sum of other two. If the ratio of other two angles is 2 : 3, then the angles are —
5) Divide 80 into two parts such that greater part is 4 times the smaller.
6) Find the number which is greater than one fifth of itself by 12.
7) If sum of three consecutive integer is 51, then middle one is (a) 15 (b) 16 (c) 17 (d) 18
8) Four fifths of a number is greater than three fourth of the number by 4. Then number is
   (a) 12 (b) 80 (c) 64 (d) 102
9) $0.25(4x-3) = 0.05(10x-9)$ is (a) $x = 0.6$ (b) $x = 6$
   (c) $x = 15/16$ (d) $x = 0.6$
10) If $y - \frac{y}{2} = \frac{1}{2}$, then y cannot be equal to
    (a) $6+1$ (b) 7 (c) -7 (d) $42 \div 6$
11) Number of solution of linear equation in one variable is
    (a) one (b) atmost two (b) infinite (c) no solution
12) If $5 = \frac{2}{3}(2x-1)$, then $x =$ (a) -1 (b) $\frac{7}{2}$ (c) $\frac{17}{4}$ (d) 4
13) If $\frac{n}{n+15} = \frac{4}{9}$, then n is (a) 4 (b) 6 (c) 9 (d) 12
14) If $5(x-3) - 4(x-2) = 0$, then $x =$ (a) -7 (b) -8 (c) 7 (d) 8
15) If a number added to its one fourth gives 40, then number = (a) 16 (b) 32 (c) 48 (d) 60
16) The ages of Ram and Sham are in the ratio 5:7. Four years from now, the ratio of their ages will be 3:4. Find their present ages.

17) Rahul's mother's present age is six times the Rahul's age. After five years, he will be $\frac{2}{7}$ of his mother's age. What are their present ages?

18) The no. of boys and girls in a class are in the ratio 7:5. The no. of boys is 8 more than the no. of girls. What is the total no. of children in the class?

19) The sum of the digits of a two digit number is 9. The number formed by reversing the digits is 45 more than the original number. Find the original number.

20) A table costs ₹200 more than the cost of a chair. The cost of 2 tables and three chairs is ₹1400. Find the cost of one table and one chair.

21) The length of a rectangle is 15cm greater than its breadth. Its perimeter is 150cm, find the dimensions of the rectangle.

22) The denominator of a rational number is greater than its numerator by 3. If numerator is increased by 14 and denominator decreased by 3, the new number becomes $\frac{11}{4}$. What is the original no.

23) Shreya has a total of ₹590 as currency notes in the denominations of ₹50, ₹20 and ₹10. The ratio of the number of ₹50 notes and ₹20 notes is 3:5. If she has a total of 25 notes, how many notes of each denomination has she?

24) The sum of three consecutive odd numbers is 39. Find the numbers.

~~25)~~

S&SR

1) $\sqrt{0.6} \times \sqrt{2.4}$ = (a) 0.12 (b) 12 (c) 12
2) $\sqrt{\frac{1445}{125}}$ = ___ (a) $\frac{17}{5}$ (b) $\frac{5}{17}$ (c) $\frac{15}{7}$
3) What least no. must be subtracted from 349 to make it a perfect square (a) 3 (b) 17 (c) 25
4) The number of digits in the square root of 9998956 is (a) 4 (b) 5 (c) 3
5) $\sqrt{0.16}$ = ___ (a) 4 (b) 0.4 (c) 0.04
6) The number of zeroes in the end of perfect square is nev
7) Squares of ____ numbers are even.
8) A number must be ____ if its square is odd.
9) The square of a number (other than 1) is either a multiple of ____ or exceeds the multiple of 4 by 1
10) The square of an odd no. is always ____
11) One-fifth of the square root of which number is 0.0c
12) The one's digit in the square root of 17956 is ___
(a) 2 (b) 3 (c) 4 (d) 5
13) Which of the following is a Pythegorean triplet?
(a) (1, 2, 3) (b) (2, 3, 4) (c) (3, 4, 5) (d) (4, 5, 6)
14) Which of the following have 4 zeroes in its squares?
(a) 20^2 (b) 200^2 (c) 2000^2 (d) 50^2
15) Which of the following end with '1'?
(a) 123^2 (b) 119^2 (c) 77^2 (d) 35^2
16) No. of digits in the square root of 19600
(a) 2 (b) 3 (c) 4 (d) none
17) Which cannot be one's digit of a square number?
(a) 0 (b) 1 (c) 2 (d) 9
18) Find greatest four digit number which is a perfect square
19) $89^2 - 88^2$ = ___
20) Find the least no. of six digits which is a perfect Sqn
21) A PT teacher wants to arrange maximum possible no. of 6000 students in a field such that the no. of rows is equal to no. of columns. Find the no. of rows if 71 students were left out after the arrangement.

22) Find the $\sqrt{81}$ by repeated subtraction.
23) Write a Pythagorean Triplet whose one number is 14.
24) $1+3+5+7+9+11 =$ ___
25)

Cubes & Cuberoots

1) $\sqrt[3]{8000} =$ ___ (a) 2 (b) 20 (c) 200 (d) none
2) $\sqrt[3]{-8} \times \sqrt[3]{-27} =$ ___ (a) -6 (b) 3 (c) 6 (d) none
3) Evaluate $\sqrt[3]{0.000729} + \sqrt[3]{0.008} + \sqrt[3]{0.125}$
4) By what number should 100 be multiplied to make it a perfect cube? (a) 3 (b) -1 (c) 10 (d) 1
5) How much volume of a cube whose one side is 1.1 cm?
(a) $1.21\ cm^3$ (b) $1.331\ cm^3$ (c) $3.1\ cm^3$ (d) $1.1\ cm^3$
6) How many perfect cubes are there from 1 to 1000?
(a) 10 (b) 12 (c) 11 (d) 14
7) Ten's digit in the cube root of 438976 is
(a) 6 (b) 7 (c) 8 (d) 9
8) What is one's digit in the Cube of 72?
(a) 2 (b) 4 (c) 6 (d) 8
10) Three numbers are in the ratio 1:2:3. The sum of their cubes is 62208. find the no.s
11) T/F?
(i) Cube of any odd number is even
(ii) A cube ~~do~~ number does not end with zeroes
(iii) If Square of a number ends with 5, then its cube ends with 25 ~~then its~~
(iv) There is no perfect cube which ends with 8
12) Estimate the cube root of 857375

VIII Revision

1) Profit = S.P − C.P
C.P = S.P − profit
S.P = CP + Profit
Profit% = $\frac{\text{Profit}}{CP} \times 100$
S.P = $\frac{100+P\%}{100} \times C.P$
C.P = $\frac{S.P \times 100}{100+P\%}$

2) loss = C.P − S.P
S.P = C.P − loss
C.P = S.P + loss
loss% = $\frac{\text{loss}}{CP} \times 100$
S.P = $\frac{100-l\%}{100} \times C.P$
C.P = $\frac{S.P \times 100}{100-l\%}$

3) discount = M.P − S.P
d % = $\frac{\text{discount}}{M.P} \times 100$
S.P = $\frac{100-d\%}{100} \times M.P$
M.P = $\frac{S.P \times 100}{100-d\%}$

4) $-\frac{1}{5} \times \frac{15^{3}}{16_{4}} = -\frac{3}{4}$

$-\frac{4}{3} - \left(\frac{-6}{7}\right) = -\frac{4^{\times 7}}{3^{\times 7}} + \frac{6^{\times 3}}{7^{\times 3}} = \frac{-28+18}{21} = -\frac{10}{21}$

5) 0
6) 0
7) $\frac{x+y}{2}$
8) 0
9) $x \times -\frac{13}{5} = \frac{117}{40}$

$x = \frac{117^{9}}{40_{8}} \times \frac{5^{1}}{-13_{1}} = -\frac{9}{8}$

10) $-\frac{9}{7} + x = \frac{16}{5}$

$x = \frac{16^{\times 7}}{5^{\times 7}} + \frac{9 \times 5}{7 \times 5} = \frac{112+45}{35} = \frac{157}{35}$

11) not defined

12) $-\frac{4}{5}$

13) 0

14) non-zero integer

15) 1

16) $\frac{5}{0}$ (d)

18) $\frac{2}{9} \times x = 40$

$x = \frac{40 \times 9}{2} = 20 \times 9 = 180$ pages

17) infinite

19) $\frac{3}{8} \times x = 240$

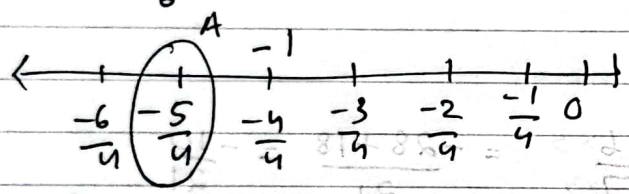
$x = \frac{240^{80} \times 8}{3_1} = 640$

$\therefore$ No. of boys $= 640 - 240 = 400$

20) $-\frac{7}{6} \times \frac{11}{9}$

$\therefore x = -\frac{7}{6} = -1\frac{1}{6}$

21)



22) $-\frac{2 \times 10}{1 \times 10}$ $-\frac{3 \times 10}{1 \times 10}$

$-\frac{20}{10}$ $-\frac{30}{10}$

$-\frac{21}{10}, -\frac{23}{10}, -\frac{27}{10}$

$-2.1, -2.3, -2.7$.

23) Commutative and associative

24) 0

25) negative

26) no

27) same

28) less

29) 1, -1

30) 1

31) No. of pieces $= 40 \div \frac{10}{3} = 40 \times \frac{3}{10} = 12$ pieces

32) Sum $= \frac{43}{12} + \frac{7^{\times 4}}{3^{\times 4}} = \frac{43+28}{12} = \frac{71}{12}$

difference $= \frac{43}{12} - \frac{7}{3} = \frac{43-28}{12} = \frac{15}{12} = \frac{5}{4}$

Quotient $= \frac{71}{12} \div \frac{5}{4} = \frac{71}{12} \times \frac{4}{5} = \frac{71}{15}$

33) $-\frac{12}{5} \times \frac{1}{x} = -\frac{12}{35}$

$\frac{1}{x} = \frac{-12}{35} \times \frac{5}{-12} = \frac{5}{35} = \frac{1}{7}$

$\therefore x = 7$

34) No

35) $x \div \frac{11}{13} = \frac{11}{13}$

$x \times \frac{13}{11} = \frac{11}{13}$

$x = \frac{11}{13} \times \frac{11}{13} = \frac{121}{169}$

36) -1

37) LHS, $\frac{2}{5} + \left(-\frac{4}{3} + \frac{8}{9}\right)$

LE

1) $8x = 18a + 6a$

$8x = 24a$

$x = \frac{24a}{8} = 3a$ //

2)

I	Brendon
$48+x$	x

$48 + x = 5x$

$48 = 4x$

$x = \frac{48}{4} = 12$ yrs //

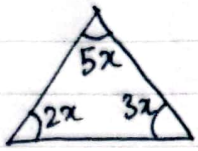
3) $5y + 7 = 0$

$5y = -7$

$y = \frac{-7}{5}$

=

4)



$5x + 2x + 3x = 180°$

$10x = 180°$

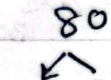
$x = 18°$

∴ The angles $2x = 36°$

$3x = 54°$

$5x = 90°$

5)



$80 - x = 4x$

$80 = 4x + x = 5x$

$x = \frac{80}{5} = 16$

∴ The Parts are 16 and 64.

6) $x - \frac{1}{5}x = 12$

15-3.

$\frac{5x - x}{5} = 12$

$4x = 12 \times 5$

$x = \frac{12^{3} \times 5}{4_{1}} = \frac{15}{=}$

7) $x + x + 1 + x + 2 = 51$

$3x = 51 - 3 = 48$

$x = \frac{48}{3} = 16$

∴ The middle no. is $x + 1 = 16 + 1 = 17$ //

8) $\frac{4^{\times 4}}{5}x - \frac{3^{\times 5}}{4}x = 4 \Rightarrow \frac{16x - 15x}{20} = 4$

$\Rightarrow \frac{x}{20} = 4$

∴ $x = 80$ //

9) $x - 0.75 = 0.5x - 0.45$

$x - 0.5x = -0.45 + 0.75$

$0.5x = 0.3$

$x = \frac{0.3}{0.5} = \frac{3}{5} = 0.6$ //

10) $\frac{2y - y}{x} = \frac{7}{2}$

$y = 7$ //

11) one

12) $15 = 2(2x - 1)$

$15 = 4x - 2$

$15 + 2 = 4x$

$4x = 17$

$x = \frac{17}{4}$ //

13) $9n = 4(n + 15)$

$9n = 4n + 60$

$9n - 4n = 60$

$5n = 60$

$n = 12$ //

14) $5x - 15 - 4x + 8 = 0$

$x - 7 = 0$

$x = 7$ //

15) $x + \frac{1}{4}x = 40$

$\frac{4x + x}{4} = 40$

$\frac{5x}{4} = 40$

$5x = 40 \times 4$

$x = \frac{40 \times 4}{5_1}$

$= 32$ //

16)

Ram	Sham
$5x$	$7x$
$5x + 4$	$7x + 4$

$\frac{5x + 4}{7x + 4} = \frac{3}{4}$

$4(5x + 4) = 3(7x + 4)$

$20x + 16 = 21x + 12$

$20x - 21x = 12 - 16$

$-x = -4$

$x = 4$ //

Present ages are 20yrs and 28 yrs

17)

Mother	Rahul
$6x$	x
$6x + 5$	$x + 5$

Then, $x + 5 = \frac{2}{7}(6x + 5)$

$7(x + 5) = 2(6x + 5)$

$7x + 35 = 12x + 10$

$7x - 12x = 10 - 35$

$-5x = -25$

$x = 5$

∴ Their present ages are 5yrs and 30yrs.

18)

Boys	Girls
$7x$	$5x$

$7x = 5x + 8$

$2x = 8$

$x = 4$

Boys = $7x = 28$

Girls = $5x = 20$

Total no. of children = 48 //

19)

T	O
$9 - x$	x

original no. $= 10(9 - x) + x$

$= 90 - 10x + x$

$= 90 - 9x$

Reversed no. $= 10x + 9 - x$

$= 9x + 9$

T	O
x	$9 - x$

Then, $9x + 9 = 90 - 9x + 45$

$18x = 135 - 9$

$= 126$

$x = \frac{126}{18} = 7$

∴ The no. is 27.

32) Sum $= \frac{43}{12} + \frac{7}{3^{\times 4}} = \frac{43+28}{12} = \frac{71}{12}$

difference $= \frac{43}{12} - \frac{7}{3} = \frac{43-28}{12} = \frac{15}{12} = \frac{5}{4}$

Quotient $= \frac{71}{12} \div \frac{5}{4} = \frac{71}{12} \times \frac{4}{5} = \frac{71}{15}$

33) $-\frac{12}{5} \times \frac{1}{x} = -\frac{12}{35}$

$\frac{1}{x} = \frac{-12}{35} \times \frac{5}{-12} = \frac{5}{35} = \frac{1}{7}$

$\therefore x = 7$

34) No

35) $x \div \frac{11}{13} = \frac{11}{13}$

$x \times \frac{13}{11} = \frac{11}{13}$

$x = \frac{11}{13} \times \frac{11}{13} = \frac{121}{169}$

36) -1

37) LHS, $\frac{2}{5} + \left(-\frac{4}{3^{\times 3}} + \frac{8}{9}\right)$

$\frac{2}{5} + \left(\frac{-12+8}{9}\right) = \frac{2^{\times 9}}{5^{\times 9}} - \frac{4^{\times 5}}{9^{\times 5}}$

$= \frac{18-20}{45} = \frac{-2}{45}$

RHS, $(x+y)+z = \left(\frac{2^{\times 3}}{5} - \frac{4^{\times 5}}{3}\right) + \frac{8}{9}$

$= \frac{6-20}{15} + \frac{8}{9} = \frac{-14^{\times 3}}{15^{\times 3}} + \frac{8^{\times 5}}{9^{\times 5}}$

$= \frac{-42+40}{45} = \frac{-2}{45}$

$\therefore$ LHS = RHS, Hence verified

38) $\frac{5}{-4} + x = \frac{5}{-4}$

$x = -\frac{5}{4} + \frac{5}{4} = 0$

39) $\frac{4}{-7}$

40) $\frac{3}{5}x - \frac{2}{7}x = 44 \Rightarrow \frac{21x - 10x}{35} = 44$

$\Rightarrow \frac{11x}{35} = 44$

$x = \frac{44 \times 35}{11} = 140$

n-zero integer

d)

$x \; x = 40$

$x = \frac{40 \times 9}{2} = 20 \times 9 = 180$ pages

finite

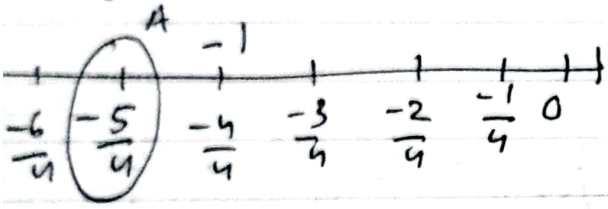
$x \; x = 240$

$x = \frac{240 \times 8}{3} = 640$

No. of boys $= 640 - 240 = 400$

$\times \frac{11}{9}$

$x = -\frac{7}{6} = -1\frac{1}{6}$



$\frac{2 \times 10}{1 \times 10}$ $\frac{-3 \times 10}{1 \times 10}$ | $-\frac{21}{10}, -\frac{23}{10}, -\frac{27}{10}$

$\frac{20}{10}$ $\frac{-30}{10}$ | $-2.1, -2.3, -2.7$

mutative and associative

ie

e

pieces $= 40 \div \frac{10}{3} = 40 \times \frac{3}{10} = 12$ pieces

41) Amount spent on notebook = $\frac{1}{3} \times 300 = 100$

Remaining = 300 − 100 = 200 -

Amount spent on stationary items = $\frac{1}{4} \times 200 = 50$

Amount left = 200 − 50 = 150Rs //

42) Distance covered = speed × time

$= 1020 \times \frac{25}{60}$ (170)

$= 4250$ km //

| speed = 1020km/hr

43) area = l × b

$\frac{261}{4} = \frac{87}{16} \times l$

$l = \frac{261}{41} \times \frac{16}{87} = 12$ m //

44) Total amount spent = $\frac{68}{5} + \frac{51}{2} + \frac{22}{5}$

$= \frac{90}{5} + \frac{51}{2} = \frac{180+255}{10}$ (×2, ×5)

$= 40.5$ Rs $\quad \frac{435}{10} = \text{Rs } 43.5$

∴ Amount saved = 80 − 43.5

= Rs 36.50 //

45) (i) $\frac{3}{5}\left(-\frac{2}{3} - \frac{1}{6}\right) + \frac{5}{2}$ (×2)

$= \frac{3}{5}\left(\frac{-4-1}{6}\right) + \frac{5}{2} = \left(\frac{3}{5} \times \frac{-5}{6}\right) + \frac{5}{2}$

$= -\frac{1}{2} + \frac{5}{2} = \frac{4}{2} = 2$

(ii) $\frac{2}{5}\left(-\frac{3}{7} + \frac{1}{14}\right) - \frac{1}{6} \times \frac{3}{2}$ (×2)

$\frac{2}{5} \times \left(\frac{-6+1}{14}\right) - \frac{1}{4}$

$\frac{2}{5} \times \frac{-5}{14} - \frac{1}{4}$

$-\frac{1}{7} - \frac{1}{4} = -\frac{4-7}{28} = -\frac{11}{28}$ //

20) Let the cost of 1 chair be Rs x

Cost of 1 table $= x + 200$

Then, $2(x+200) + 3x = 1400$

$2x + 400 + 3x = 1400$

$5x = 1400 - 400 = 1000$

$x = \frac{1000}{5} = 200$

Cost of 1 table $= 200 + 200$

$= Rs\ 400$

Cost of 1 chair $= Rs\ 200$

21) ~~Let~~ $l = b + 15$

$2(l+b) = 150$

$2(b+15+b) = 150$

$2b + 15 = 75$

$2b = 75 - 15 = 60$

$b = 30$

$\therefore l = 45\ cm$

$b = 30\ cm$

22) ~~Solve~~ Let the numerator be x

denominator $= x + 3$

$\frac{x+14}{x+3-3} = \frac{11}{4}$

$4(x+14) = 11x$

$4x + 56 = 11x$

$56 = 11x - 4x$

$7x = 56$

$x = 8$

$\therefore$ The fraction is $\frac{8}{11}$ //

23) Let the no. of ₹ 50 notes be $3x$

and ₹ 20 notes be $5x$

Then, no. of ₹ 10 notes $= 25 - (3x + 5x)$

$= 25 - 8x$

Thus, $3x \times 50 + 5x \times 20 + 10(25 - 8x) = 590$

$150x + 100x + 250 - 80x = 590$

$170x = 340$

$x = 2$

$\therefore$ No. of ₹ 50 notes $= 6$

₹ 20 notes $= 10$

₹ 10 notes $= 25 - 16$

$= 9$ //

24) Let the three consecutive odd numbers be $x, x+2$ and $x+4$.

$x + x + 2 + x + 4 = 39$

$3x = 39 - 6 = 33$

$x = 11$

$\therefore$ The no.s are 11, 13, 15.