INDIAN SCHOOL AL WADI AL KABIR
(2020 - 21)

Class: VIII	Department: MATHEMATICS	
Worksheet No: 1	Topic: Linear equations in one variable	Note:

Multiple Choice Questions

Q.1. A linear equation in one variable has

A	Only one solution	B	Two solutions	C	Three solutions	D	Infinite solutions

Q.2. If $(5x - 5) + 3(2x - 5) = 8x - 26$, then $x =$

A	5	B	3	C	-2	D	7

Q.3. If $\frac{a-3}{5} = \frac{a-9}{2}$, then the value of a is

A	13	B	9	C	10	D	8

Q.4. One sixth of a number when subtracted from the number itself gives 25. The number is:

A	33	B	32	C	35	D	30

Q.5. What should be added to $\frac{-2}{3}$ to get $\frac{5}{7}$?

A	$\frac{29}{21}$	B	$\frac{5}{7}$	C	$\frac{-29}{21}$	D	$\frac{4}{5}$

Q.6. If 3(2z - 3) = 2z +7. Find z

A	14	B	4	C	2	D	-2

Q.7. 3 added to a number is 11. Convert the following statements into equations.

A	3 + p = 11	B	3 + 11 = p	C	P + 11 = 3	D	3 + p + 11 =0

Q.8. Frame the equation for "2 times the sum of the number x and 7 is 13"

A	$2x - 5 = 13$	B	$2x + 13) = 7$	C	$2x + 7) = 13$	D	$2(x + 7) = 13$

Q.9.	A carpenter charges Rs. 2500 for making a bed. The cost of material used is Rs. 1100 and labour charges Rs 200/hr. For how many hours did the carpenter work?							
	A	1	B	2	C	7	D	4
Q.10	Mahu thought of a number, doubled it and added 20 to it. On dividing the resulting number by 25, she gets 4. What is the number?							
	A	**10**	**B**	**40**	**C**	**50**	**D**	**20**
Q.11	STATE TRUE/FALSE: The three-consecutive multiple of 7 would 7x, 7x + 7, 7x + 21							
Q.12	The cost of a pencil is 5 Rs more than the cost of an eraser. If the cost of 8 pencils and 10 erasers is Rs 130, then the cost of pencil is 10 Rs is true.							
Q.13	A sum of Rs 2700 is to be given in the form of 63 prizes. If the prize is of either Rs 100 or Rs 25, find the number of prizes of each type.							
Q.14	The present age of Sahil's mother is three times the present age of Sahil. After 5 years their ages will add to 66 years. Find their present ages.							
Q.15	Bansi has 3 times as many two-rupee coins as he has five-rupee coins. If he has in all a sum of Rs 77, how many coins of each denomination does he have?							
Q.16	The sum of three consecutive multiples of 11 is 363. Find these multiples.							
Q.17	Half of the number of boys of Class 8 B went to the football ground to play. One fourth of the total number of boys went to the Library to take books. Remaining 10 boys went to the 3rd Language room. Find the number of boys of Class 8 B.							
Q.18	Ramesh is a cashier in a Canara bank. he has notes of denominations of Rs. 100, 50 and 10 respectively. The ratio of number of these notes is 2:3:5 respectively. The total cash with Ramesh is 4,00,000. How many notes of each denomination does he have?							
Q.19	The digits of a two-digit number differ by 3. If the digits are interchanged, and the resulting number is added to the original number, we get 143. What can be the original number?							

Q.20	Present ages of Anu and Raj are in the ratio 4:5. Eight years from now the ratio of their ages will be 5:6. Find their present ages.
Q.21	The denominator of a rational number is greater than its numerator by 4. If numerator is increased by 11 and the denominator is decreased by 1, the new number becomes $\frac{7}{3}$. Find the original number.
Q.22	Arjun is twice as old as Shreeya. Five years ago, his age was three times Shreiya's age. Find their present ages.
Q.23	The perimeter of a rectangle is 13 cm and its width is $3\frac{2}{4}$ cm. Find its length.
Q.24	Jane is 6 years older than her younger sister. After 10 years, the sum of their ages will be 50 years. Find their present ages.
Q.25	Two equal sides of a triangle are each 4m less than three times the third side. Find the dimensions of the triangle, if its perimeter is 55m.

Answer key

1	One solution	2	-2	3	13	4	30
5	$\frac{29}{21}$	6	4	7	3 + p =11	8	$2(x + 7) = 13$
9	7	10	40	11	false	12	Rs 10, true
13	X=15	14	X=14	15	X=7	16	X=10
17	40	18	X=1,000	19	85or 58	20	X=8
21	X=3	22	X=10	23	l =3cm	24	X=12
25	9m, 23m, 23m						