Canara High School, A.S.R.Pai Road, Dongerkery, Mangalore

Class: VI **Mathematics -Algebra** **February 2014**

I) Fill in the blanks :

1. Letters used to represent numbers are called _____
2. The literals whose value vary from problem to problem are called _____
3. Numerals whose value is fixed are called _____
4. The statement of equality which involves literals is called an _____
5. The value of the variable which satisfies the equation is called the _to the equation

II) Write the expression :

1. m increased by 8.
2. b decreased by 31.
3. Five items x increased by 5 gives 55.
4. Half of p subtracted from the sum of a and b.
5. Product of 7 and x divided by the difference of 7 and x.
6. Sum of p, q and r divided by the product of a and 5.
7. One fourth of the difference of x and y.
8. 4 subtracted from n, gives 36.
9. z minus twice x.
10. m taken away from 50, gives 15.

III) Identify the solution and show that other values do not satisfy

1. X+8=24 (x=3, x=15, x=16, x=0)
2. 4a=32 (a=8, a=4, a=6, a=7)
3. y-9=29 (y=20, y=38, y=37, y=39)
4. $\frac{p}{5}$ =16 (p=75, p=85, p=90, p=80)

IV) Solve :

1. X+11 = 30
2. 6a=24
3. m-5=2
4. $\frac{x}{4}$ =2
5. $\frac{x}{7}$ = 5
6. $\frac{a}{9}$ = 4
7. 10n = 70
8. 16=y+10
9. t-14=0
10. 4x=32
11. 17-p=15
12. 23-y=0

Answers :

I) 1. Variables 2. Variables 3. Constants 4. Equation 5. Solution

II) 1. m+8 2. b-31 3. 5x+5=55 4.(a+b) - $\frac{1}{2p}$ ***5.*** $\frac{1}{4}$ ***(x-y) 6. n-4=36***

7. z-2x 8. 50-m=15 9. $\frac{7x}{7-x}$ ***10.*** $\frac{p+q+r}{5a}$

III) 1. x=16 2.a=8 3.y=38 4.p=80

IV) 1. x=19 2. a=4 3. m=7 4. x=8 5. x=35 6. a=36 7. n=7 8. y=6
9. t=14 10. x=8 11. p=2 12. y=23