CHAP - 3 Standard - 10<sup>th</sup> SUB: MATHS

## **Choose correct answer(s) from the given choices**

[3 Mark]

(1) The given systems of equations -4x - y = -25 and -8x - 2y = 38 has:

a. Only one solution.

**b.** Infinitely many solutions.

c. No solution.

d. None of these.

(2) Graph of a homogeneous system of equations is

**a.** parallel

**b.** intersecting or coincident

c. always coincident

**d.** always intersecting

(3) Gita and Ajoy have some pencils. Gita says to Ajoy, "If you give me 12 of your pencils, I will have twice the number of pencils left with you". Ajoy replies, "if you give me 12 of your pencils I will have the same number of pencils left with you". Find the number of pencils with Gita and Ajoy separately.

**a.** 86 and 62

**b.** 82 and 62

**c.** 84 and 60

**d.** 82 and 58

## Solve:-

## [Any 2, 2Marks each]

- (1) Five years ago, Nuri was thrice as old as Sonu. Ten years later, Nuri will be twice as old as Sonu. How old are Nuri and Sonu?
- (2) The Sum of digits of two digit number is 9. Also, Nine times this number is twice the number obtained by reversing the order of digits. Find the number.
- Solve the following pair of linear equations by cross-Multiplication method. 8x + 5y = 93x + 2y = 4
- (4) In a two digit number, the units digit is twice the tens digit. If 36 is added to the number, the digits interchange their places. Find the number.

(1) Solve the following system of linear equations by using the method of elimination by equating the coefficients.

$$x/7 - y/3 = 14$$
  
 $x/4 + y/2 = 44$ 

(9) Sonia travels 396 km, partly by bus and partly by bike. If she covers 72 km by bus and the rest by bike, it takes her 8 hour. If she travels 288 km by bus and the rest by bike, it takes her 2 hours more. Find the speed of the bus and that of the bike.