Mathematical Aptitude

Linear Equation In One Variable

Skill Based Questions

Q.1.	. Multiple choice questions:								
Directions: Read the following questions and choose the answer that best answers the questions.									
1.	If the value of $2+3x$ is equal to $2-3x$, then the value of $5+3x$ is								
	(a) 3	(b) 0	(c) 2	(d) 5					
		()	()						
2.	If $x = y$ then								
	(I) $x + a = y + a$	(II) $x-a=y-a$	(III) $ax = ay$	(IV) $\frac{x}{a} = \frac{y}{a}ifa \neq 0$					
	Which one is correct?								
	(a) Only I and II	(b) Only I, II and III	(c) Only I and III	(d) All four					
Q.2.	Subjective questions:								
1.	I think of a number. When I multiply it by 3 and then add 9. I get 30. What is the number?								
Ans	Think of a hamoer. When Thianply it by 5 and men add 2, 1 get 50. What is me hamoer.								
1113.									
9	Hina is 5 kg haariar th	an Pina. Lat Pina's ma	a ha x ka						
Ζ.	Filma is 5 kg neavier than kina. Let kina's mass be x kg.								
	(1) Express Hina's mass	Express Hina's mass in terms of x . (ii) If Hina's mass is 63 kg, find Rina's mass.							
Ans.									

3.	Solve for x if	kx + a = mx + b
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- Ans.
- 4. Solve for $x:(\sqrt{5}+5)x+4=-2\sqrt{5}+8$

Ans.

5. Solve: $\frac{1}{2}(3y+1) - \frac{1}{3}(5y+2) = y-1$

Ans.	 	

6. A number consists of two digits. The digit at ten's place is two times the digit at the unit's place. The number formed by reversing the digits, is 27 less than the original number. Find the original number.

Ans.

Crossword Puzzle



ACROSS

- 1. Expressing a given polynomial as a product of two or more factors is called ______.
- **3.** A symbol which takes various values is known as a _____.
- **4.** An ______ is defined as a combination of constants, variables and coefficients using four fundamental mathematical operations $(+, -, \div, \backslash)$.
- 5. A statement of equality of two algebraic expressions involving a variable is called a ______.
- 8. A symbol having a fixed numerical value is called a ______.
- **9.** A mathematical sentence which contains a variable such that it may be true or false depending on the values of the variable, is called an sentence.
- **10.** In the product of a variable and a constant, each is called the ______ of the other.

DOWN

- **2.** Any term of an equation may be taken to the other side with the sign changed. This process is called ?
- **6.** The solution of an equation is also called the ______ of the equation.
- 7. An equation which contains only one variable of degree 1 is called a ______ linear equation.