## ONLINE COACHING-DAY 93- (12-07-2019)

LINEAR AND QUADRATIC EQUATIONS


## NAME OF THE CANDIDATE: *

M4

## PLACE: *

PATHANATHITTA

## PLEASE ENTER YOUR CONTACT NO: *

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## PLEASE WATCH THE ONLINE CLASSES CAREFULLY AND NOTE DOWN IT IN YOUR DIARY BEFORE SENDING THE ANSWERS.

Please watch the videos of online classes given below.
https://youtu.be/PNOjOvhGhkw

https://youtu.be/f-6E6-y3dP4

https://youtu.be/btHGqCZb1BY

https://youtu.be/QpOAkGDO3gg


1. Solve $-6 x+5 y=2,-5 x+6 y=9$. Find the values of $x$ and $y$ ? *$X=3, Y=3$$X=4, Y=3$$X=3, Y=4$$X=4, Y=4$
2. Solve $3 x+2 y=-25,-2 x-y=10$. Find $x$ and $y$ ? *5,20$-5,-20$$-5,20$
() $5,-20$
3. For what value of $k$ will the system of equations $k x+2 y=5$,and $3 x+y=1$ have a unique solution? *K not equal to 2$K$ not equal to 3K not equal to 5K not equal to 6
4. Solve $x+y=7,3 x-2 y=11$. Find the values of $x$ and $y$ ? *5,24,32,5$-2,-3$
5. For what value of $k$, the system of equations $3 x+4 y=6$ and $6 x+$ $8 y=k$ represent, coincident lines? *K equal to 4K equal to 8K equal to 12K equal to 6
6. For what value of $k$ the equations $9 x+4 y=9$ and $7 x+k y=5$ have no solution? *$22 / 7$$28 / 9$$29 / 9$29/7
7. If $p=3 / 5, q=7 / 9, r=5 / 7$, then which of the following inequality is true? *$p<q<r$$q<r<p$$p<r<q$$r<q<p$
8. If $7 n+9>100$ and $n$ is an integer, then smallest possible value of $n$ is *13121415
9. If $6 x-5 y=13,7 x+2 y=23$, then $11 x+18 y$ is equal to *3315$-15$51
10. Renus mother was three times as old as Renu 5 yr ago. After 5 yr, she will be twice as old as Renu. Renus present age(in yr) is *351020
(-) 15
11. A fraction becomes $7 / 8$, if 5 is added to both the numerator and the denominator. If 3 is added to both the numerator and the denominator, it becomes $6 / 7$. Find the fraction. *8/119/11$10 / 11$Couldn't be determined
12. Father is aged three times more his son Remu. After 8 yr , he would be $21 / 2$ times of Ramus age. After further 8 yr, how many times would he be of Ramus age ? *2 times$21 / 2$ times$23 / 4$ times3 times
13. For what values of $k$ will the following pair of linear equations have infinitely many solutions? $k x+3 y-(k-3)=0$ and $12 x+k y-k=0$ .*24
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14. Kamala got married 6 yr ago. Today, her age is $11 / 4$ times of her age at the time of marriage, Her son's age is $1 / 10$ times her age. Her son's age is *4 yr5 yr2 yr3 yr
15. A father is 30 times older than his son. 18 yr later, he will be only 1 point thrice as old as his son.Fathers present age(in yr) is *25304045
16. 3 yr ago X 's age was double of $Y$ 's seven years, hence the sum of 1 point their United ages will be 83 yr . The age of x today is *47354524
17. Eight consecutive numbers are given. If the average of the two numbers that appear in the middle is 6 , then the sum of the eight given numbers is *36485464
18. If the sum of five consecutive integers is $S$, then the largest of those integers in terms of $S$ is *S-10/5$S+4 / 5$$S+5 / 4$
() $S+10 / 5$
19. Solve $2 x^{\wedge} 2+6=7 x$. *$x=2, x=3 / 2$$x=1, x=2 / 3$$x=3, x=1 / 6$$x=2, x=2 / 3$
20. Which of the following equations has real roots? *$3 x^{\wedge} 2+4 x+5=0$$x^{\wedge} 2+x+4=0$$(x-1)(2 x-5)=0$$2 x^{\wedge} 2-3 x+4=0$
21. If $2 x^{\wedge} 2-7 x y+3 y^{\wedge} 2=0$, then the value of $x: y$ is *$3: 2$2:3$3: 1$5:6
22. Of the following quadratic equations, which is the one whose roots are 2 and -15 ? *$x^{\wedge} 2-2 x+15=0$$x^{\wedge} 2+15 x-2=0$$x^{\wedge} 2+13 x-30=0$$x^{\wedge} 2-30=0$
23. If $a, b$ are the two roots of a quadratic equation such that $a+b=$ 24 and $a-b=8$, then the quadratic equation having $a$ and $b$ as it's roots is *$x^{\wedge} 2+2 x+8=0$$x^{\wedge} 2-4 x+8=0$$x^{\wedge} 2-24 x+128=0$$2 x^{\wedge} 2+8 x+9=0$
24. The product of the ages of Ankit and Nikita is 240 . If twice the age of Nikita is more than Ankits age by 4 years, what is Nikita's age? *
() 12201814
25. Ratio of the two numbers is $3: 4$ and the sum of these two numbers is 420 . The sum of their squares is *$9 \times 10^{\wedge} 3$$9 \times 10^{\wedge} 4$$9 \times 10^{\wedge} 5$None of these

## THANK YOU!

