## Mathematics Tasks 15/08/2023

ITTATIONAL EQUATIONS 18.08 Nº 3 10 J3 X + 10 - JX + 9 = 2 173x+10-x+9=4 (2) 2 X + 14 = 4 2 X = -- (14+4) 2X2-10  $\chi = +5 \implies -10 = 5$ . (3x+10-5x+4 1=2  $(\sqrt{3}x+10)^2=(2+\sqrt{x}+4)^2$ 3x +10 = 4+ 4/5x+4 + x+4. 2X+2 2 4 JX+4 X+1 = 2 JX+4 (1/21 (X+1)2 = 4 (X+41 x2+2x+1=4x+16 x2-2 x-15 30 Dz 62 -400 24 + 60 -64

$$D_{2}(9)^{2} - 4.8 - 81 - 32 = 49$$

$$X_{1}^{2} = \frac{3 \pm 7}{2 \cdot (6)} = \frac{16}{2 \cdot (-2)} = \frac{1}{2 \cdot (-2)}$$

$$X_{1}^{2} = \frac{4}{2} + \frac{1}{2} = \frac{1}{2} + \frac{3}{2} = \frac{1}{2} = 2$$

$$4 + \sqrt{\frac{4}{2}} + 2 = 6 + 2$$

$$1 = \frac{1}{2} + 2 = \frac{1}{2} + \sqrt{\frac{9}{4}} = \frac{1}{2} + \frac{3}{2} = \frac{1}{2} = 2$$

$$0 \mid X = \frac{1}{2}$$

$$\sqrt{5} \times -4 + \sqrt{3} \times +1 < 3$$

$$\sqrt{5} \times -4 < 3 - \sqrt{3} \times +1 < 3$$

$$\sqrt{5} \times -4 < 3 - 6 \sqrt{3} \times +1 + 3 \times +1$$

$$6 \sqrt{3} \times +1 < -5 \times +4 + 9 + 3 \times +1$$

$$6 \sqrt{3} \times +1 < 7 - 2 \times 3$$

$$3 \sqrt{3} \times +1 < 7 - 2 \times 3$$

3 J3×+7 < 7-× (2) 9 13X+11 2 49 - 14X +x 27×+92419-14×+×2 x2-41x+4070 x2-41+40=0 D= 1-4112 - 4.40 = 1321 (59822233) X112 = 41±39 - 80 240/227 X 2 = 1 022 x = - 1 / gre J3×+1 = J3·07/3+1=0 55-1-4-5-5-4-17 orpursail double 10 plus soit he evo sult znovent gnarezak c[-00'-3] bel nog nogen

55x-4 = X € \$ 5. \$ = 20 - 4 = 4-42 2 50. Zurus BCR To relucue 5 , nou ue nognogné non Korte Its home goes of purgote brewing pezque-Jas y rappere, a store volto ne gaesure lan kgrens kbogpasnous. x2-41x+40>0 x € 1-00-110140, +00) 3 SIX+1 < 7 = X, culpolore loko × goine K bush X 7. u x gosmea vous x = = = , que oppur your boyus unoign von remue of recorne. nol meso noy rignelle Tole kell wareen & X E 1-001/10/40+00) a nog rogeage u yeroluem e bre esad 5 + 00) culgo lose uno X E[5/1), 0; X € [= 1]

20. 
$$\sqrt{\frac{2}{2} - 4x + 3} \le 1$$
  
20.  $\sqrt{\frac{2}{x} - 3x + 2} = 1$   
 $x^2 - 3x + 2 \neq 0$ .  
 $(x - 2)(x - 1)$   
 $x^2 - 4x + 3 = 0$   
 $(x - 3)(x - 1)$   
 $x \in (-\infty, 1)(1, 2)$   $uE3, +\infty$   
 $x^2 - 4x + 3 = 0$   
 $x^2 - 4x + 3 =$ 

 $\frac{x-3}{x-2}-1 \leq 0$  $x-3 = |x-2| \le 0$  $\frac{x-3}{(x-2)} \neq 0$ -1 X-2 4 0 How upono trobe every c cox revolce, allgo beg e egue X monse T Solo Polono no do-Musall rebull ! X>0., Tak Kont - 6 zua leensterel yact nam nevoc, to go le en X = 1, -1-2 = -1 < 1, 100 ×1 u 2 na de ne regno grat Tak ka k y nac zusmenstant (x-2/(x-1). longer x moment na runated e 3 km

4 6012 (0)-1 4 cos (10 -0) ph/3 -0/= 4 cos 2/0/-1 cos la - B1= cos (a) cos (B)+ Cos 1 75 - 0 1 = cos 1 5 ) cos 101 + 2/ 5/ 8/10/ J3 coz 101 - 1 2 2 2/01 Jin 13 -01 un 1, a - B1 - Sih ( o 1 cap ( B) - cap ( v ) zin 13 - a1 = zin /3/ cor (a) - cos /3/ 12/n/a) 13 co(101 - 2 thr (01 4 1 53 cos(01 + 2 cin(01/ 2 cos(01- 2 (sinky) 4/3/60 2/01- 4 sin 2/01/

3-2 = 1 = 0 4 Take me < 1. OFBEF X E [3 + 00) N= 1, 4, 20 1. SIN/A) = 11 4. sin (300) = 1 20 4 con ( 6 - a ) Jin ( 5 - a ) = ( 5 cha) Jin 13a 1 = 3 Jun (a) - 4 zun 3 (a) 3 sin/a1-4 zh 3/a/ son (a) Jin 2014 cog (a1 =1 Col (0) = 1- fin2 (0) 3-411-60821017 3-4+4 Cof 2/a/

3 con 2 (01 - Wn 2/01 Jun 2/0/+ cog 2/0/=1 7 in 101 = 1- cog 210/ 3 cox 2 (01 - (1- cox 2 fa)) 4 coz (01-1 462/01-1=4632/01-1 No 1,13,18 1. cos 12x1 - Jun (7x)-4=0 Jin (201 - 2 sin 10 1 Roy (0) Son 17x 1= 2 son 13.5x1 cog 13.5x1 cos 12×1-2 fin 13, 5×1 cog 13, 5×1-920 cos 12 01 = 1-2 fin 2001 gue cos 12x) 1-2 Jin 2x - 7 Flax -400

-2 Wn 2x -7 July x - 2 =0 16-1/ 2 July 2 x + 7 July x +3 =0 3ún x = 4 4 [11] 242+37+3=0 D= 25 = 1491 = 241 = 525 = 5 y, 2 = 7 + 5 = -2 = -2 y, 2 = -3 Jih == = 1 6 son (-01 = - sin (0) Jun 1-70 1 = 8h 10 = - 1 = >0= 51 X12012K5=-172 kn 12=1-0+2kx=x-1-5/1+2kx=7/072/c/s.

3 con 2 (01 - Jun 2/01 Jin 2/0/+ cog 2/0/=7 7 in 101 = 1- cog 2/0/ 3 cop 2 (01 - 11 - (02 (a)) 4 coz 2 (01-1 4602/01-1=46032/01-1 No 1,13,13 1. Cos 12X1 - Film (7X)-4=0 Jin 1201 = 2 sin 10 1 Roy (a) In 17x 1= 2 Fin 13. 5x/ cog 13.5x/ - 2 fin 13, 5x/ Cog 13, 5x1-9> cos 12 01 = 1-2 fin 2 (01 gue cos 12x) 2 Jin 2x - 7 Flax -400

-2 Wn 2x - 7 July x - 2=0 10-11 2 July 2 x + 7 July x +3 =0 30n x = 4 4 € [11] 242+34+3=0 2= 25 = 1491 = 241 = 525 = 5 y, 2 = 7 + 5 = -2 = -2 y, 2 = -3 y, 2 = -3 Jun x 2 - 2 Jeh 6 - 2 le son (-a1 = - seh (a) Jun 1-70 1 = - sin 10 = - 1/2 > 0= 50 X12012KJ = - 1 2 Kn x2=x-6+2k5 = 5-1-1-5-1+2ks= 70-12/ch.

Jin 2 X - [53 + 11 John X cos X) + 53 cofx Bullnougge de choesto! sin (X) / Cos (X) = ten (X) U gelle na me ypobreme na cog

sin (x)? = (52+1) = sin(x) cog (x) + 58 coglate

cos (x)?

cos (x)?

cos (x)?

cos (x)? son(x12 - (J3+1) x sin(x) + √3 20 ton X/2 - 53+1 e ein 1x/ + 3=0, ten(x12-(53+1) = fin (x/ + 52 = 0 ton 1x12-158+110 ton 1x1 + 5 20 ton 1X12 - (S3 tanixi+ tanix) + S3

tan(x)2 - S3 tanixi= tanixi+ S3

tan() + An(x)2 - S3 tanixi= tanixi+ S3

tan() + An(x)2 - S3/- + AN(x)+ S300

JAN (X) (+An(X)-V3) = (+An(X)-V3) =0 - () (+an(x)-53)x (+an(x)-11=0 -> - (An (1)-13 TAP (11-53 = 0 +ANIX)-1=0 1 An (X) 2 53 tAn (x)=1 Tomen c repeoque coko a goy uxusus le provenue robtope vores repe 17 po quen 180 magy cob/. x = oxectan 153 1+ Il k, k - yeld zeeces aci arcton (531 & Tet paquen 160 yaqques Tros que coronos rauresec palen 1 710 y ras 45 magy col. +An 191 = 7, 4-Tore Hove juonenue voblique voice l'assugue 45% 180/45=4 tankli= 4+10K 0: +AnIXI= + TIK; 7 + 5TK