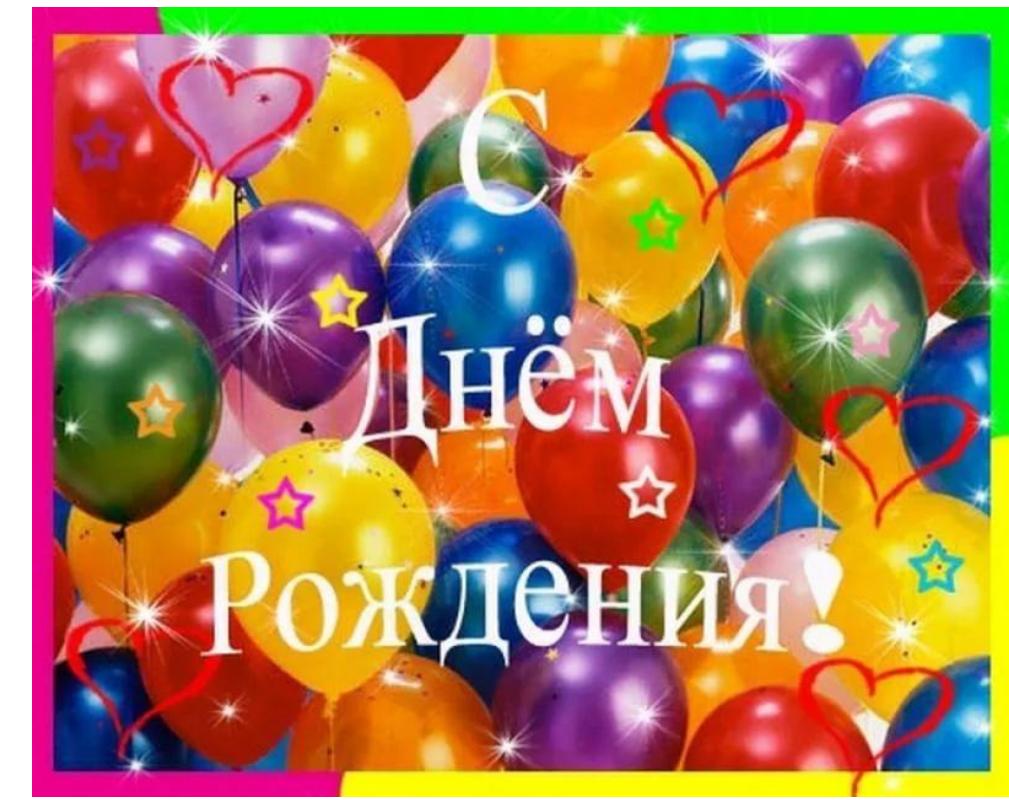2.5) $(x^2-2x)/(4x-3) + 5 = (16x-12)/(2x-x^2)$

$(-(2x-x^2)(2x-x^2)-(16x-12)(4x-3))/(4x-3)(2x-x^2)+5=0$

$2x-x^2=t$

$4x-3=k$

$(-t^2-4k^2+5kt)/kt=0$

$kt!=0$

$-t^2+5kt-4k^2=0$

$t^2-5kt+4k^2=0$

$1-5k/t+4k^2/t^2=0$

$k/t=u$

$1-5u+4u^2=0$

$4u^2-5u+1=0$

$D=25-16=9$

$u1=(5-3)/8=¼$

$u2=(5+3)/8=1$

$k/t-¼=0$

$k/t-1=0$

$(4x-3)/(2x-x^2)-¼=0$

$4(4x-3)-2x+x^2=0$

$16x-12-2x+x^2=0$

$x^2+14x-12=0$

$D=49+12=61$

$x1=-7-√61$

$x2=-7+√61$

$2x-x^2=4x-3$

$x^2+2x-3=0$

$x1=-3$

$x2=1$

Ответ:$-7+√61$; $-7-√61$; -3; 1.

2) $(2x-5)/(3x+1) + (21x+7)/(2x-5) = 8$

$(2x-5)^2/(3x+1)(2x-5)+(21x+7)(3x+1)/(3x+1)(2x-5)-8=0$

$((2x-5)^2+(21x+7)(3x+1)-8)/(3x+1)(2x-5)=0$

$(4x^2-20x+25+63x^2+21x+21x+7-8(3x+1)(2x-5))/(3x+1)(2x-5)=0$

$67x^2+22x-48x^2+120x-16x+40=0$

$19x^2+126x+72=0$

$D=3969-1368=2601$

$x1=(-63+51)/19=-12/19$

$x2=(-63-51)/19=-6$

$x!=-⅓$

$x!=5/2$

Ответ: $-12/19$; -6.