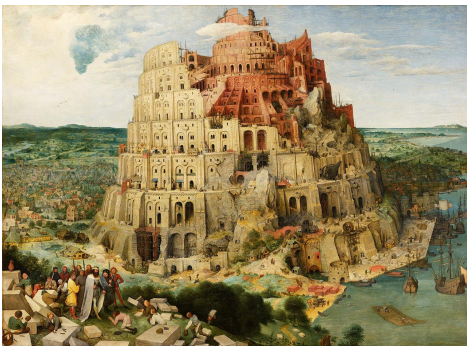


Для решения нижеизложенных уравнений да помогут вам 2-е великие формулы

$(x + y)^2 = x^2 + 2xy + y^2$

$x^2 - y^2 = (x + y)(x - y)$



- 1) $x^2 + 2 * x + 1 = 0$
- 2) $x^2 - 6 * x + 9 = 0$
- 3) $x^2 - 10 * x + 25 = 0$
- 4) $x^2 - 10 * x + 16 = 0$
- 5) $x^2 - 10 * x + 34 = 0$
- 6) $x^2 - 10 * x + 10 = 0$
- 7) $4x^2 - 12 * x + 9 = 0$
- 8) $25x^2 - 10 * x + 10 = 0$
- 9) $16x^2 - 24 * x + 10 = 0$
- 10) $2x^2 - 8 * x + 8 = 0$
- 11) $2x^2 - 12 * x + 18 = 0$
- 12) $27x^2 - 18 * x + 12 = 0$
- 13) $4x^2 - 24 * x + 36 = 0$
- 14) $4x^2 - 24 * x + 20 = 0$
- 15) $3x^2 - 12 * x - 4 = 0$
- 16) $3x^2 - 15 * x - 4 = 0$
- 17) $3x^2 - 15 * x - 27 = 0$
- 18) (!!!)(*) $a * x^2 + b * x + c = 0$

$x^2 + 2 * x + 1 = 0;$
 $x^2+2x(1)+1^2=0;$
 $(x+1)^2=0;$
 $x=-1;$

$x^2 - 6 * x + 9 = 0;$
 $x^2-2(3)x+3^2=0;$
 $(x-3)^2=0;$
 $x=3;$

$x^2 - 10 * x + 25 = 0;$
 $x^2-2(5)x+5^2=0;$
 $(x-5)^2=0;$
 $x=5;$

$x^2 - 10 * x + 16 = 0;$
 $x^2-2(5)x+5^2-5^2+16=0;$
 $(x-5)^2-5^2+16=0;$
 $(x-5)^2-9=0;$
 $((x-5)+3)((x-5)-3)=0;$
 $(x-5+3)(x-5-3)=0;$
 $(x-2)(x-8)=0;$
 $x1=2;$
 $x2=8;$

$x^2 - 10 * x + 34 = 0;$
 $x^2-2(5)x+5^2-5^2+34=0;$
 $(x-5)^2-5^2+34=0;$
 $(x-5)^2+9=0$
 $(x-5)^2=-9$
 $no solutions$

$x^2 - 10 * x + 10 = 0$
 $x^2-2(5)x+5^2-5^2+10=0;$
 $(x-5)^2-5^2+10=0;$
 $(x-5)^2-15=0;$
 $((x-5)+V15)((x-5)-V15)=0;$
 $(x-5+V15)(x-5-V15)=0;$
 $x1=5-V15;$
 $x2=5+V15;$

$4x^2 - 12 * x + 9 = 0;$
 $(2x)^2-2(3)2x+3^2=0;$
 $(2x-3)^2=0;$
 $x=1,5;$

$25x^2 - 10 * x + 10 = 0;$
 $(5x)^2-2(1)(5x)+1^2-1^2+10=0;$
 $(5x-1)^2-1+10=0;$
 $(5x-1)^2+9=0;$
 $(5x-1)^2=-9;$
 $no solutions$

$16x^2 - 24 * x + 10 = 0;$
 $(4x)^2-2(3)(4x)+3^2-3^2+10=0;$
 $(4x-3)^2-3^2+10=0;$
 $(4x-3)^2+1=0;$
 $no solutions$

$2x^2 - 8 * x + 8 = 0;$
 $2(x^2-2(2)x+2^2)=0;$
 $2(x-2)^2=0;$
 $x=2;$

$2x^2 - 12 * x + 18 = 0;$
 $2(x^2-2(3)x+3^2)=0;$
 $2(x-3)^2=0;$
 $x=3;$

$27x^2 - 18 * x + 12 = 0;$
 $3((3x)^2-2(1)(3x)+1^2-1^2+4)=0;$
 $3((3x-1)^2-1+4)=0;$
 $3((3x-1)^2+3)=0;$ |:3
 $(3x-1)^2+3=0;$
 $no solutions$

$4x^2 - 24 * x + 36 = 0;$
 $4(x^2-2(3)x+3^2)=0;$
 $4(x-3)^2=0;$
 $x=3;$

$4x^2 - 24 * x + 20 = 0;$
 $4(x^2-2(3)x+3^2-3^2+5)=0;$
 $4((x-3)^2-9+5)=0;$
 $4((x-3)^2-4)=0;$ |:4
 $(x-3)^2-4=0;$
 $((x-3)+2)((x-3)-2)=0;$
 $(x-3+2)(x-3-2)=0;$
 $(x-1)(x-5)=0;$
 $x1=1$
 $x2=5$

$3x^2 - 12 * x - 4 = 0;$
 $3(x^2-2(2)x+2^2-2^2-4/3)=0;$
 $3((x-2)^2-4-4/3)=0;$ |:3
 $(x-2)^2-4-4/3=0;$
 $(x-2)^2-16/3=0;$
 $((x-2)+4/V3)((x-2)-4/V3)=0;$
 $(x-2+4/V3)(x-2-4/V3)=0;$
 $x1=2-4/V3;$
 $x2=2+4/V3;$

$3x^2 - 15 * x - 4 = 0;$
 $3(x^2-5x-4/3)=0;$ |:3
 $x^2-5x-4/3=0;$
 $x^2-2(5/2)x+(5/2)^2-(5/2)^2-4/3=0;$
 $(x-5/2)^2-25/4-4/3=0;$
 $(x-5/2)^2-3*25/12-4*4/12=0;$
 $(x-5/2)^2-91/12=0;$
 $((x-5/2)-V91/V12)((x-5/2)+V91/V12)=0;$
 $(x-5/2-V91/V12)(x-5/2+V91/V12)=0;$
 $x1=5/2-V91/V12;$
 $x2=5/2+V91/V12;$

$3x^2 - 15 * x - 27 = 0;$
 $3(x^2-5x-9)=0;$ |:3
 $x^2-5x-9=0;$
 $x^2-2(5/2)x+(5/2)^2-(5/2)^2-9=0;$
 $(x-5/2)^2-25/4-9=0;$
 $(x-5/2)^2-25/4-36/4=0;$
 $(x-5/2)^2-61/4=0;$
 $((x-5/2)-V61/2)((x-5/2)+V61/2)=0;$
 $(x-5/2-V61/2)(x-5/2+V61/2)=0;$
 $(x-(5+V61)/2)(x-(5-V61)/2)=0;$
 $x1=(5+V61)/2;$
 $x2=(5-V61)/2;$

$a * x^2 + b * x + c = 0 ;$
 $a(x^2+bx/a+c/a)=0;$ |:a
 $x^2+bx/a+c/a=0;$
 $x^2+2(b/(2a))x+(b/(2a))^2-(b/(2a))^2+c/a=0;$
 $(x+b/(2a))^2-b^2/(4a^2)+c/a=0;$
 $(x+b/(2a))^2-b^2/(4a^2)+4ac/(4a^2)=0;$
 $(x+b/(2a))^2-(b^2-4ac)/(4a^2)=0;$
 $((x+b/(2a))+V(b^2-4ac)/(2a))((x+b/(2a))-V(b^2-4ac)/(2a))=0;$
 $(x+b/(2a)+V(b^2-4ac)/(2a))(x+b/(2a)-V(b^2-4ac)/(2a))=0;$
 $(x+(b+V(b^2-4ac))/(2a))(x+(b-V(b^2-4ac))/(2a))=0;$
 $D=b^2-4ac$
 $(x+(b+VD)/(2a))(x+(b-VD)/(2a))=0;$
 $x1=(-b-VD)/(2a);$
 $x2=(-b+VD)/(2a);$

$a * x^2 + b * x + c = 0 ;$
 $D=b^2-4ac$
 $x1=(-b-VD)/(2a);$
 $x2=(-b+VD)/(2a);$